

October 31, 2017

Mr. Allan Batka
United States Environmental Protection Agency
Region 5 (WU-16J)
77 West Jackson Blvd.
Chicago, Illinois 60604

Re: EGT Monthly Report (in conformance with MI-163-1W-C010 & MI-163-1W-C011)

Dear Mr. Batka:

Environmental Geo-Technologies, LLC ("EGT") hereby timely submits its forty-seventh Monthly Report in conformance with the requirements of its two EPA UIC permits (#s MI-163-1W-C010 & MI-163-1W-C011).

EGT is providing all of the attached information in the same sequence as required by both subject permits, i.e. Part II.D.1 (a-i), Part III, Attachment A, and Part III, Attachment E.G.2 & E.I. Due a computer outage, the 'simplified' summary pages are not included, however, they will be provided to you once the contracted computer specialist corrects the issue.

EGT hereby timely submits its twenty-seventh Injection Fluid Analyses (for September, 2017) identified on both Pages A-3 of 3 also in conformance with EGT's two EPA UIC permits with the attached "Data Summary Sheet" from a contract laboratory, Ann Arbor Technical Services, Inc., and, those results demonstrate compliance with all of the limits for each of the chemical entities ("Names) identified on Page A-3 of 3 for F039 waste even though EGT did not accept any F039 waste for September 2017.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

We trust that you find this interim report satisfactory, however, if you have any questions or comments, please feel free to contact us.

Sincerely,



Richard J. Powals, P.E.
Vice-President

cc: J. Frost (EGT), T. Athans (EGT), P. Sullivan (EGT)
att.

rjp103117/EGTEPAMonthlyReport-September, 2017



290 South Wagner Road
 Ann Arbor, Michigan 48103
 Tel. 734/995-0995 Fax. 734/995-3731
 Michigan Laboratory ID: 9804
 Wisconsin Laboratory ID: 998321720

Semivolatile Organic Compounds Data Summary Sheet

For: Mr. Richard Powals
 Environmental Geo-Technologies, Inc.
 28470 Citrin Drive
 Romulus, MI 48174

ATS Project: Environmental Geo-Technologies, Inc. #E008-000
 Report Date: 10/25/17
 ATS SRF: 1004171

Sample Identification: September Composite 2017

Sample Date:	10/2/17	QC Batch Number:	QCORG1005171-E
Laboratory Receipt Date:	10/4/17		B7J0066
Preparation Date:	10/5/17, 10/12/17	Sample Matrix:	Wastewater
Analysis Date:	10/9/17, 10/14/17	Dilution Factor:	500

<u>Parameter (CAS)</u>	<u>Method</u>	<u>Units</u>	<u>Result</u>	<u>Reporting Limit</u>
Aldrin (309-00-2)	EPA 8270 Mod	mg/mL	<0.00001	0.00001
Benzidine (92-87-5)	EPA 8270 Mod	mg/mL	<0.00075	0.00075
N-Nitrosodimethylamine (62-75-9)	EPA 8270 Mod	mg/mL	<0.0001	0.0001
Tetraethyl Lead (78-00-2)	EPA 8270 Mod	mg/mL	<0.00005	0.00005
Hexachlorodibenzo-p-dioxins	EPA 1613B	mg/mL	<0.0000000005	0.0000000005
Octachlorodibenzofuran (39001-02-0)	EPA 1613B	mg/mL	<0.0000000005	0.0000000005
Octachlorodibenzo-p-dioxin (3268-87-9)	EPA 1613B	mg/mL	<0.0000000005	0.0000000005
Tetrachlorodibenzo-p-dioxins	EPA 1613B	mg/mL	<0.0000000004	0.0000000004

<u>Surrogates / Labeled Standards:</u>	<u>Method</u>	<u>Percent Recovery</u>	<u>Recovery Limits</u>
2-Fluorobiphenyl	EPA 8270 Mod	76.0	(50 - 150)
Nitrobenzene-d5	EPA 8270 Mod	87.9	(50 - 150)
p-Terphenyl-d14	EPA 8270 Mod	118.2	(50 - 150)
Tetrachloro-m-xylene (TCMX)	EPA 8270 Mod	76.7	(50 - 150)
13C-1,2,3,4,7,8-HxCDD	EPA 1613B	59.0	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	EPA 1613B	64.2	(28 - 130)
13C-1,2,3,7,8,9-HxCDD	EPA 1613B	57.2	(32 - 141)
13C-OCDF	EPA 1613B	39.8	(17 - 157)
13C-OCDD	EPA 1613B	40.2	(17 - 157)
13C-2,3,7,8-TCDD	EPA 1613B	43.3	(25 - 164)

Comments:

USEPA Analysis 1613B performed by Vista Analytical.

AVERAGE INJECTION RATE

Calculation of Average Injection Rate

CURRENT REPORTING YEAR 2017

CURRENT REPORTING MONTH SEPTEMBER

Date (month, year) of the first injection into either well at the Citrin Road Facility
Nov 2013

CURRENT MONTH (all volumes in gallons)

	Injected Waste	Injected Non-Waste	Total injected
MI-163-1W-C010, Well #1-12			
Current Month	522,120	0	522,120
Since facility first injected			12,625,709
MI-163-1W-C011, Well #2-12			
Current Month	0	0	0
Since facility first injected			4,648,736
		Lifetime Combined	17,274,445

Conversion factors

365.25 days per year ÷ 12 months per year = 30.4375 days per month
30.4375 days per month × 1440 minutes per day = 43,830 minutes per month

Calculations

Whole number of months of injection 46

 lifetime number of months of injection × 43,830 minutes/month
= 2,016,180 minutes of injection

Lifetime combined injected volume 17,274,445 ÷ 2,016,180 minutes of injection
= 8.6 gpm average injection rate

WELL 1 DATA

Circle Chart Index

Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174

Chart Recorder #1

Channel #1

Blue Pen - Well 1 Injection Pressure (chart value x 30)

Channel #2

Red Pen - Well 1 Annulus Pressure (chart value x 30)

Channel #3

Green Pen - Well 1 Flow Rate (chart value x 4)

Channel #4

Black Pen - Well 1 Annulus Tank Level (chart value x 0)

Chart Recorder #2

Channel #1

Blue Pen - Well 2 Injection Pressure (chart value x 30)

Channel #2

Red Pen - Well 2 Annulus Pressure (chart value x 30)

Channel #3

Green Pen - Well 2 Flow Rate (chart value x 4)

Channel #4

Black Pen - Well 2 Annulus Tank Level (chart value x 0)

Chart Recorder #3

Channel #1

Blue Pen - Injection pH Well 1 & 2 (chart value ÷ 3.3)

Channel #2

Red Pen - Well 1 Monthly Volume (chart value x 100,000)

Channel #3

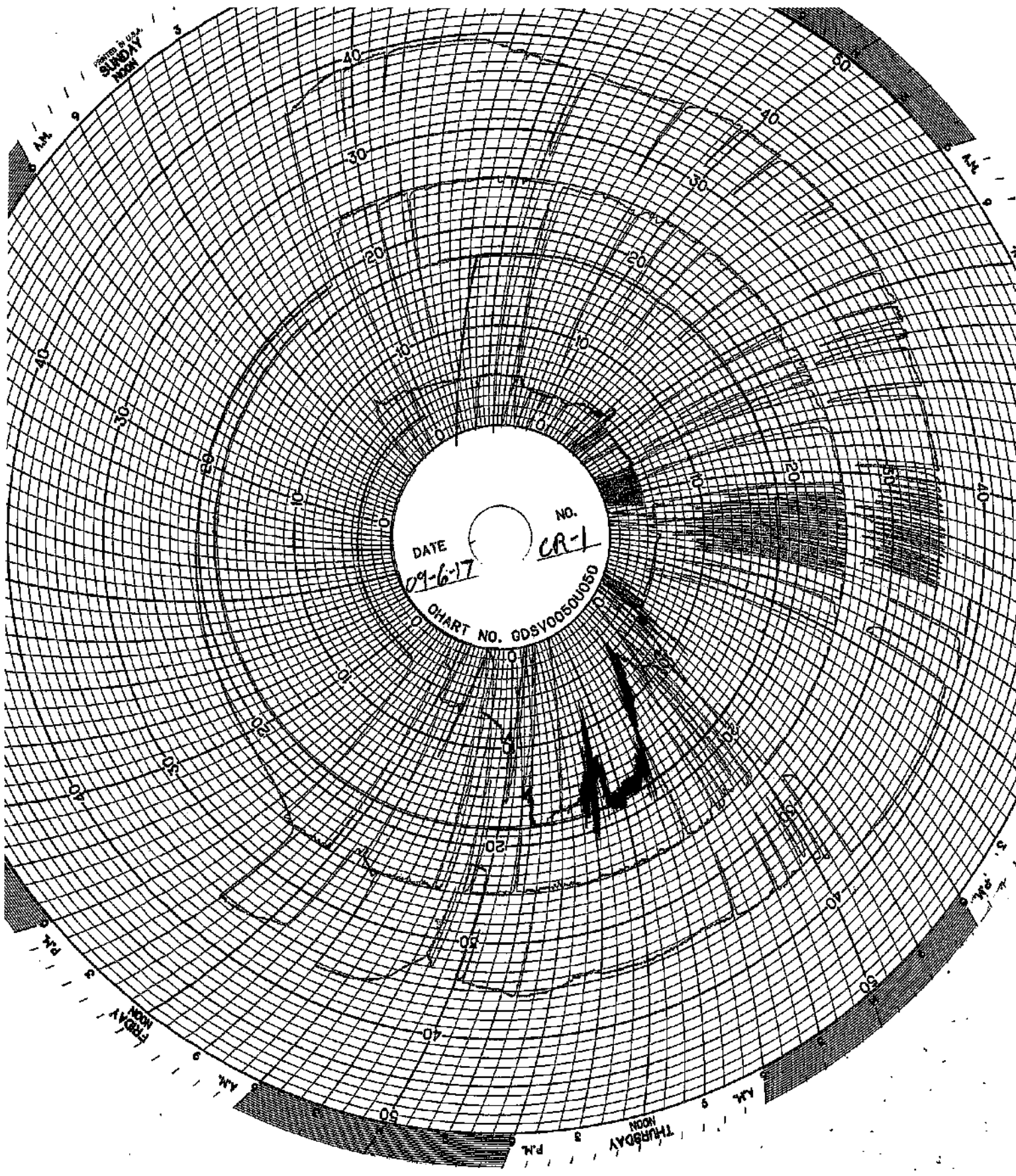
Green Pen - Well 2 Monthly Volume (chart value x 100,000)

Channel #4

Black Pen - Temperature (chart value x 0)

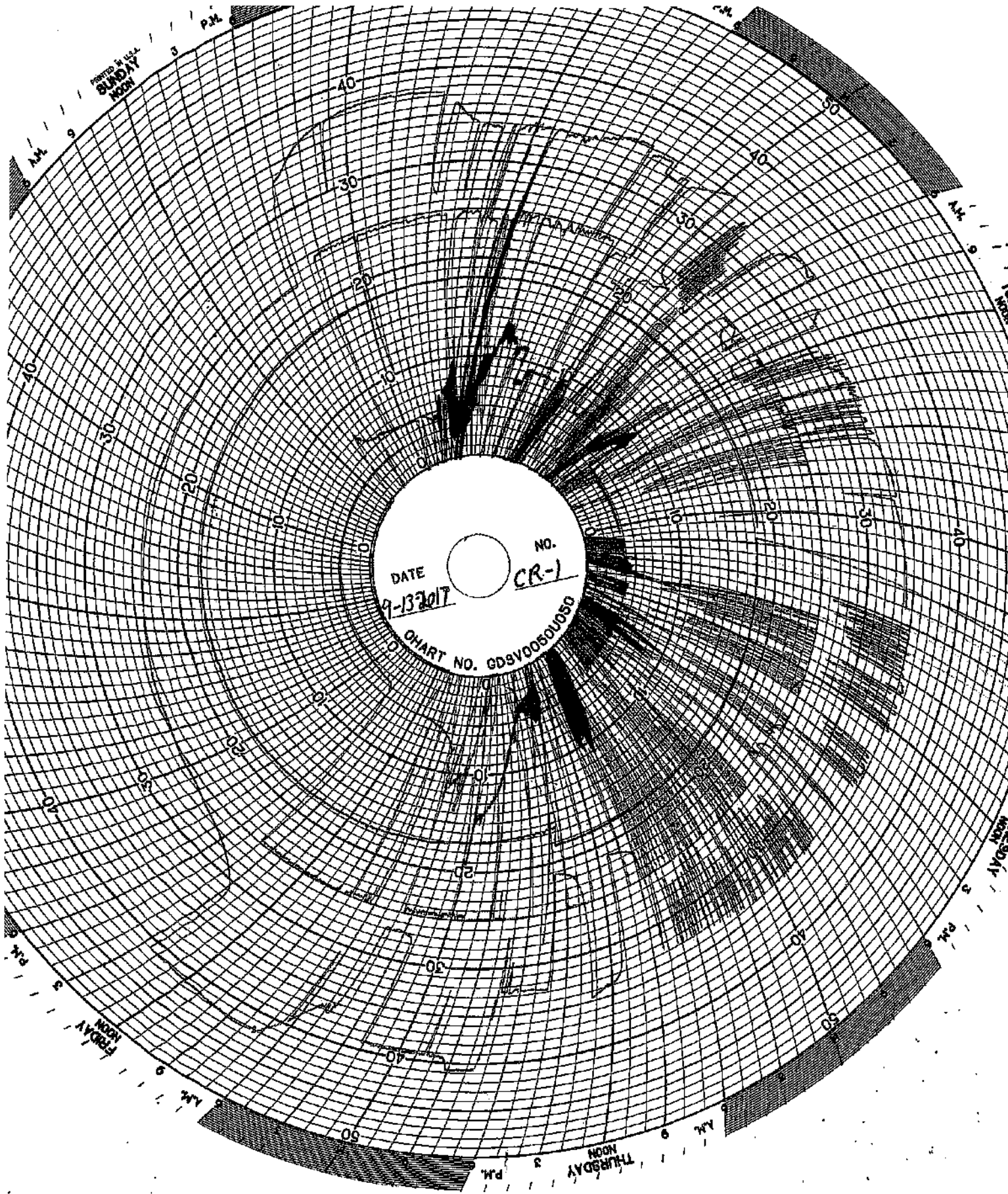
Printed in U.S.A.
SUNDAY

DATE 09-6-17 No. CR-1
CHART NO. GDSV0050U050



FRIDAY
NOON

THURSDAY
NOON



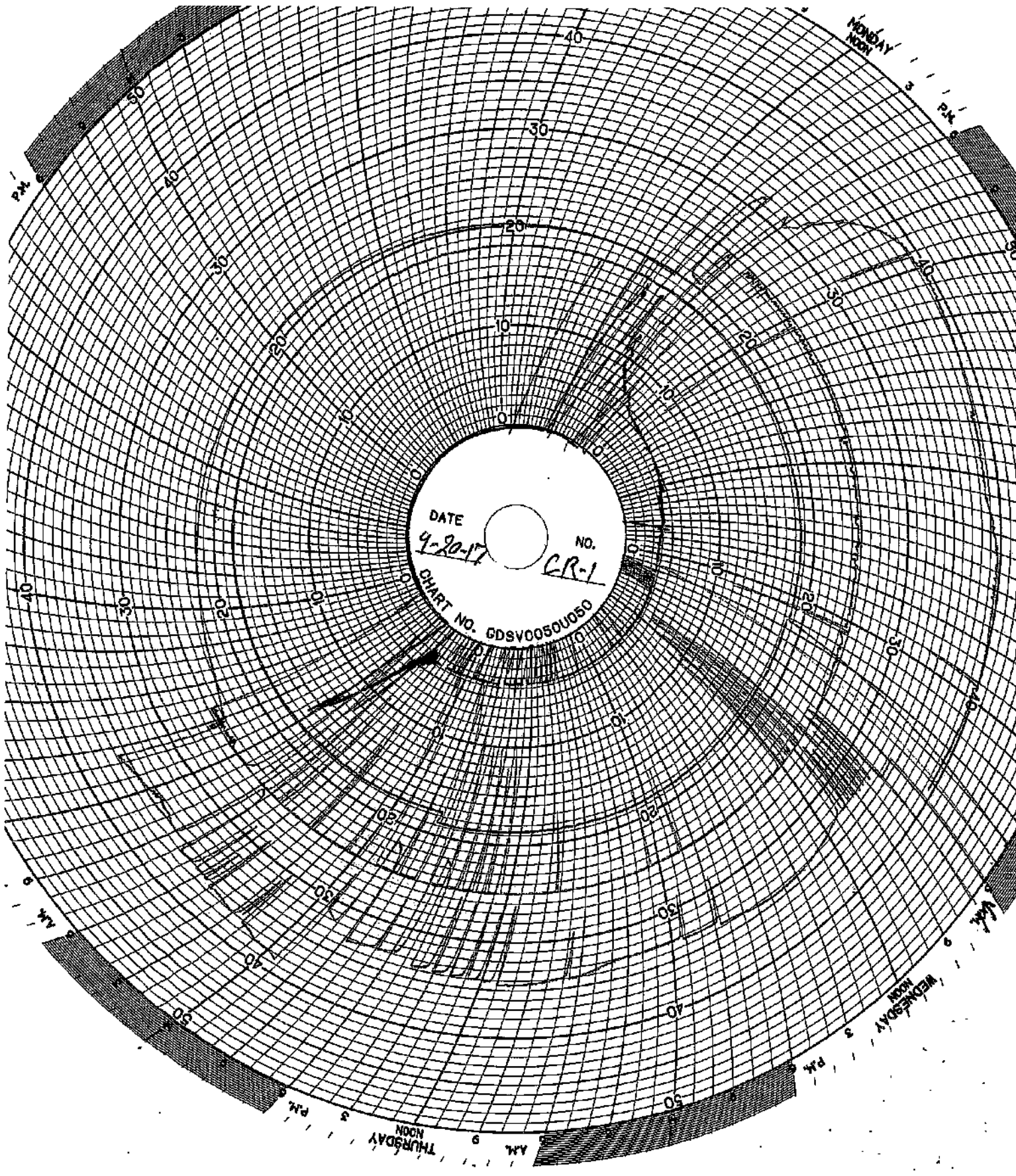
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CHART NO. GDSV0050V050

THURSDAY
NOON 3 P.M.

FRIDAY
NOON 3 P.M.

SUNDAY
NOON 3 P.M.

SATURDAY
NOON 3 P.M.



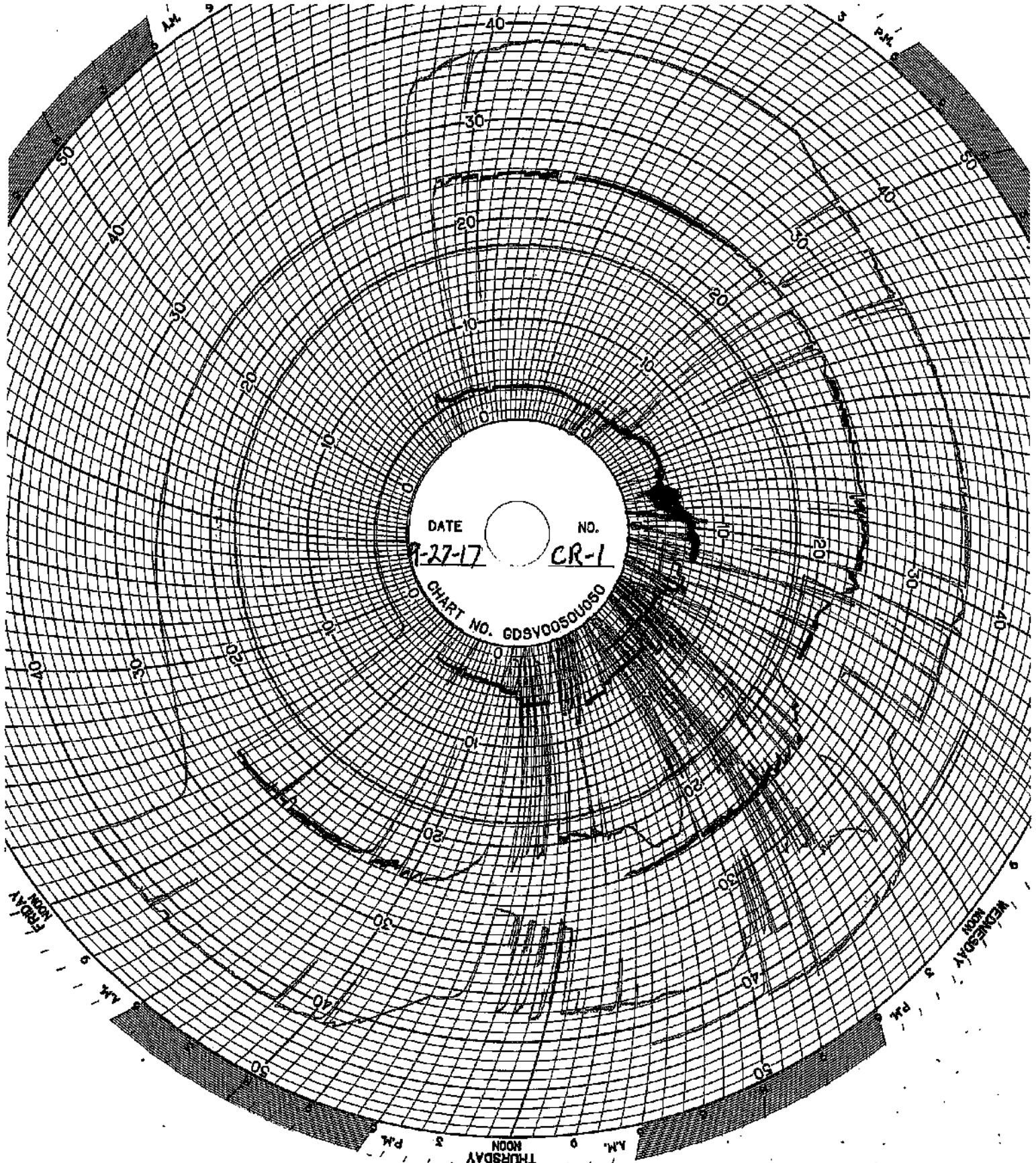
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NO. CR-1
CHART NO. GDSV0050U050

MONDAY
NOON

WEDNESDAY

THURSDAY

AM



DATE 7-27-17 NO. CR-1
CHART NO. GDSV0050U060

THURSDAY

WEDNESDAY

WELL 2 DATA

Circle Chart Index

Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174

Chart Recorder #1

Channel #1

Blue Pen - Well 1 Injection Pressure (chart value x 30)

Channel #2

Red Pen – Well 1 Annulus Pressure (chart value x 30)

Channel #3

Green Pen – Well 1 Flow Rate (chart value x 4)

Channel #4

Black Pen – Well 1 Annulus Tank Level (chart value x 0)

Chart Recorder #2

Channel #1

Blue Pen – Well 2 Injection Pressure (chart value x 30)

Channel #2

Red Pen – Well 2 Annulus Pressure (chart value x 30)

Channel #3

Green Pen – Well 2 Flow Rate (chart value x 4)

Channel #4

Black Pen – Well 2 Annulus Tank Level (chart value x 0)

Chart Recorder #3

Channel #1

Blue Pen – Injection pH Well 1 & 2 (chart value ÷ 3.3)

Channel #2

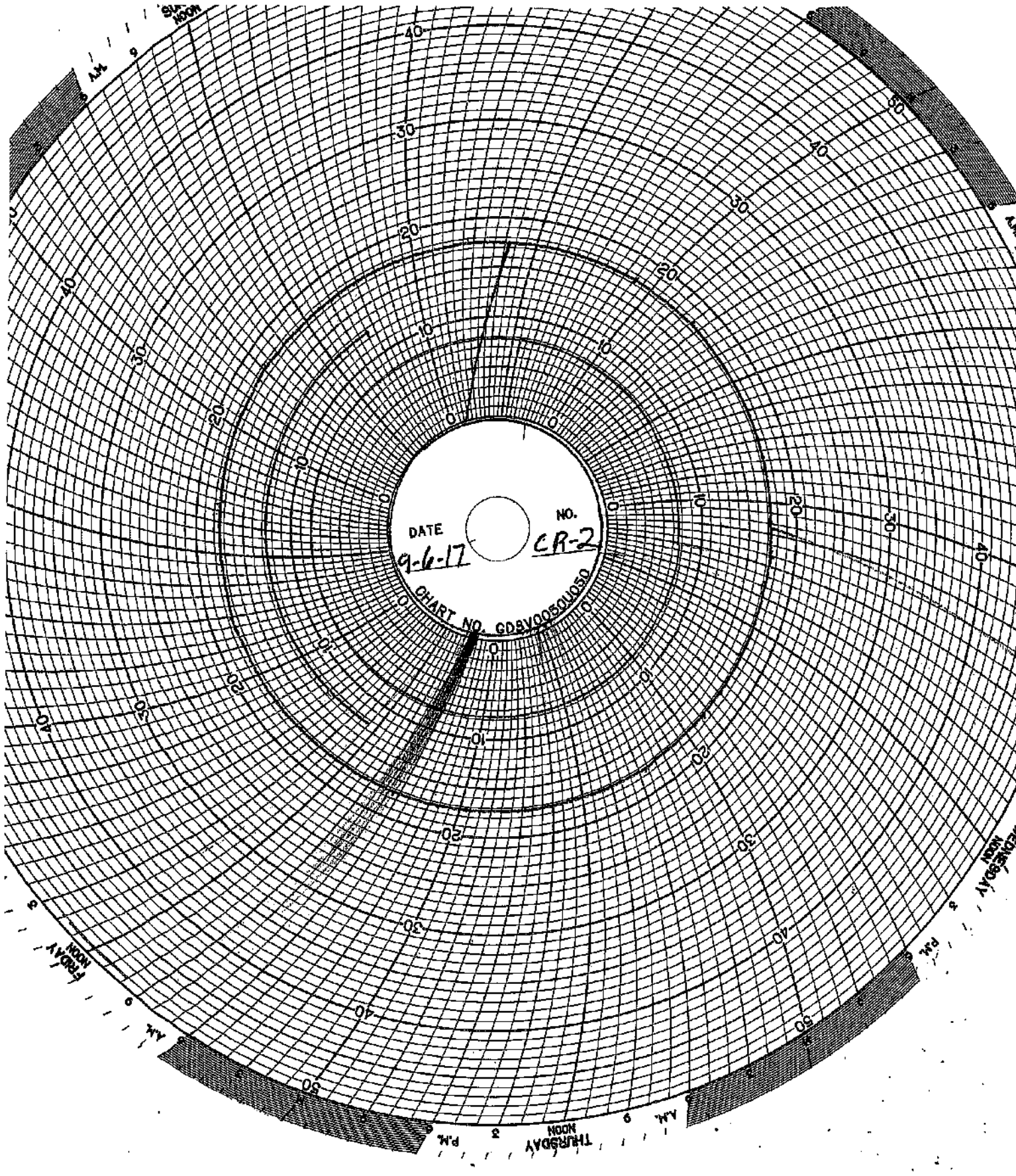
Red Pen – Well 1 Monthly Volume (chart value x 100,000)

Channel #3

Green Pen – Well 2 Monthly Volume (chart value x 100,000)

Channel #4

Black Pen – Temperature (chart value x 0)



DATE 9-6-17

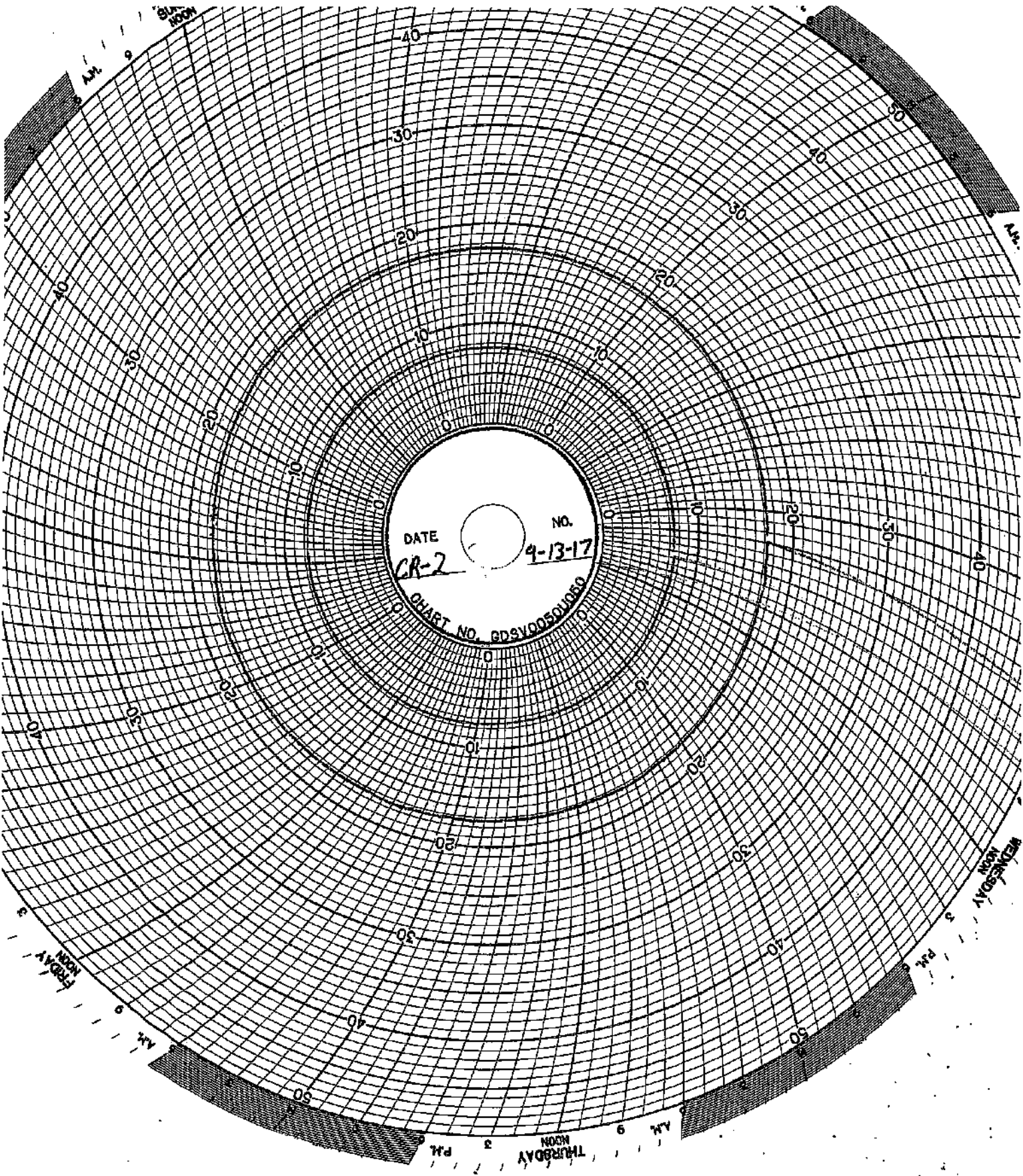
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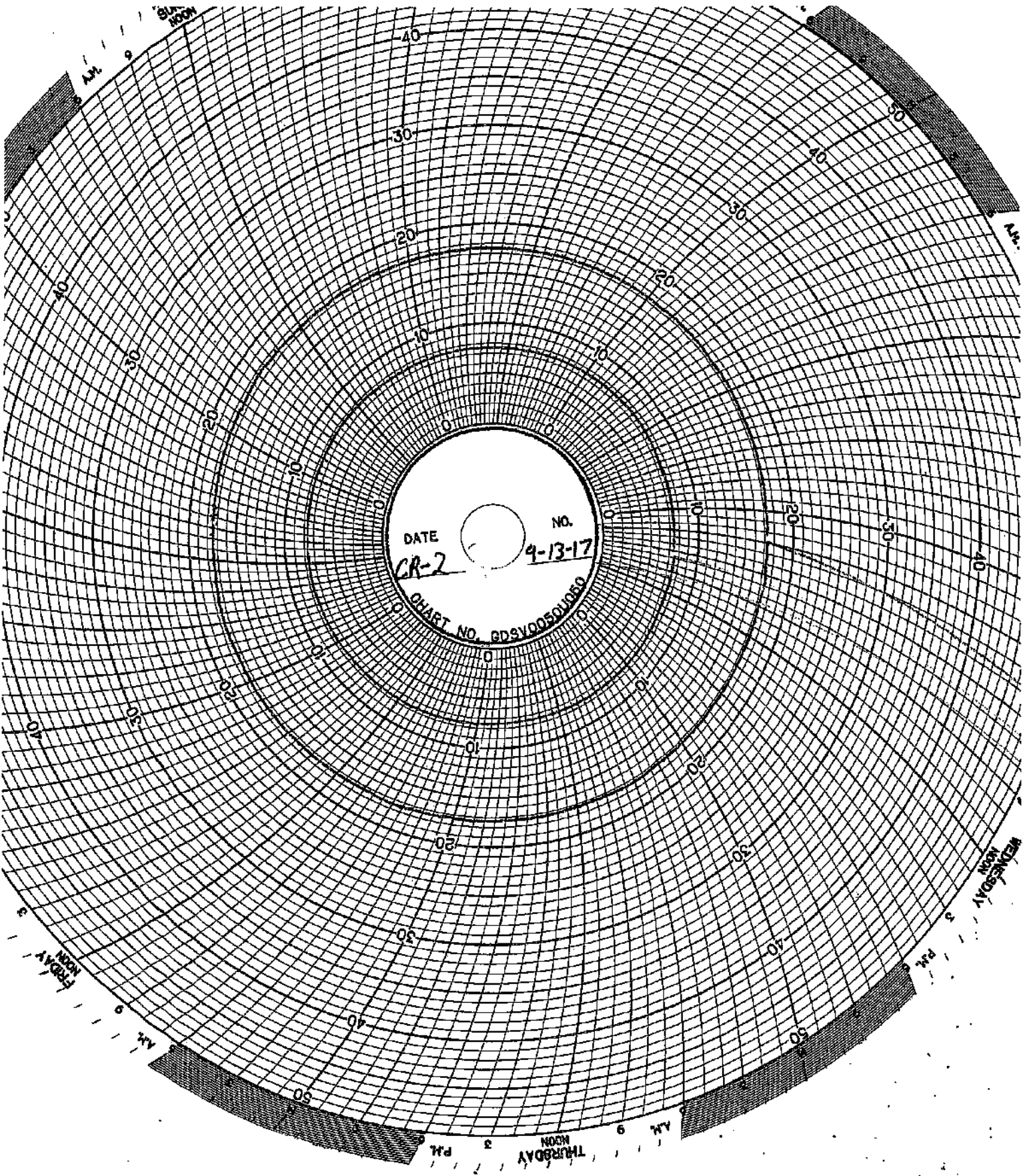
THURSDAY

FRIDAY

THURSDAY



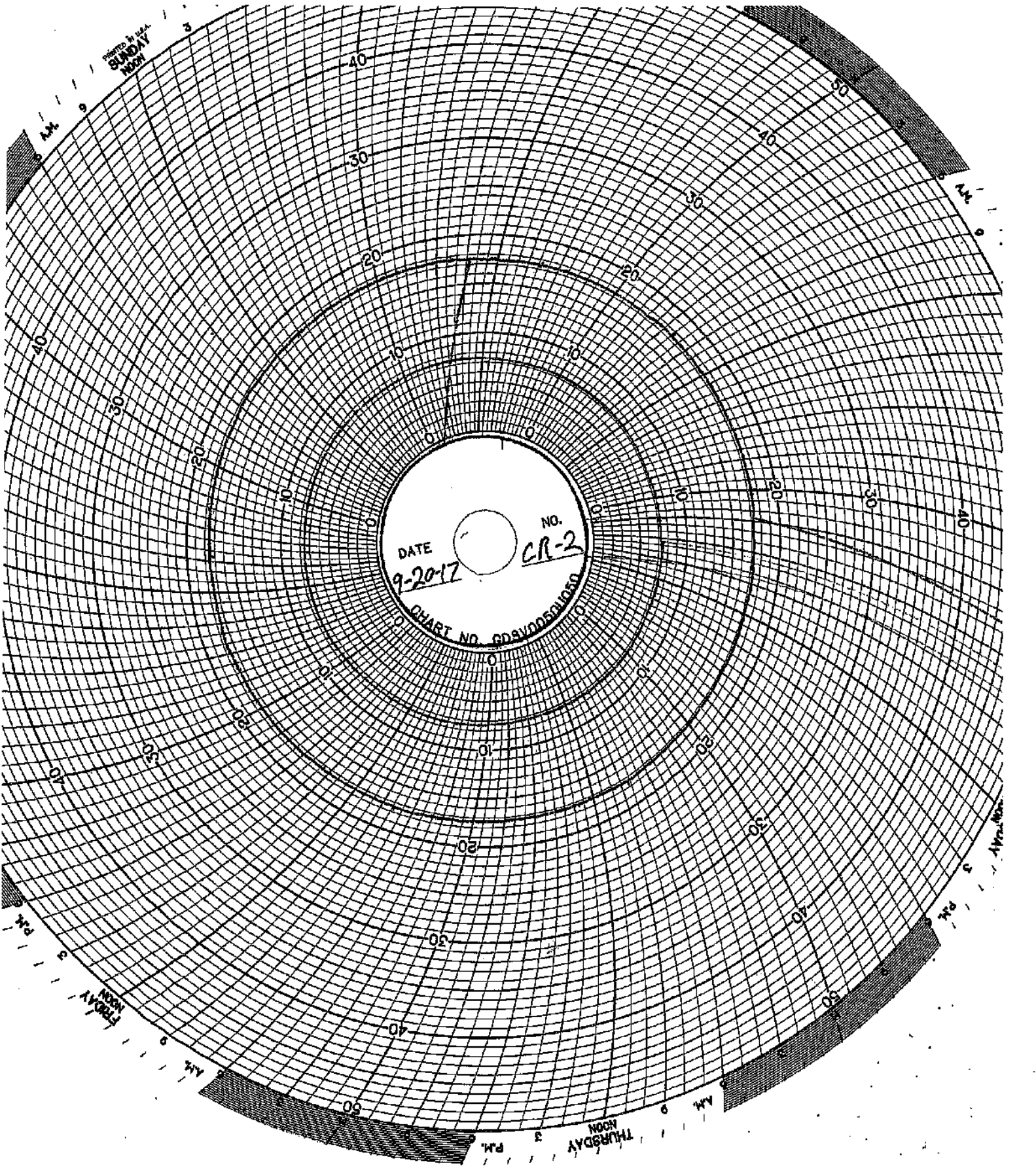
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CHART NO. 6DSV00501060



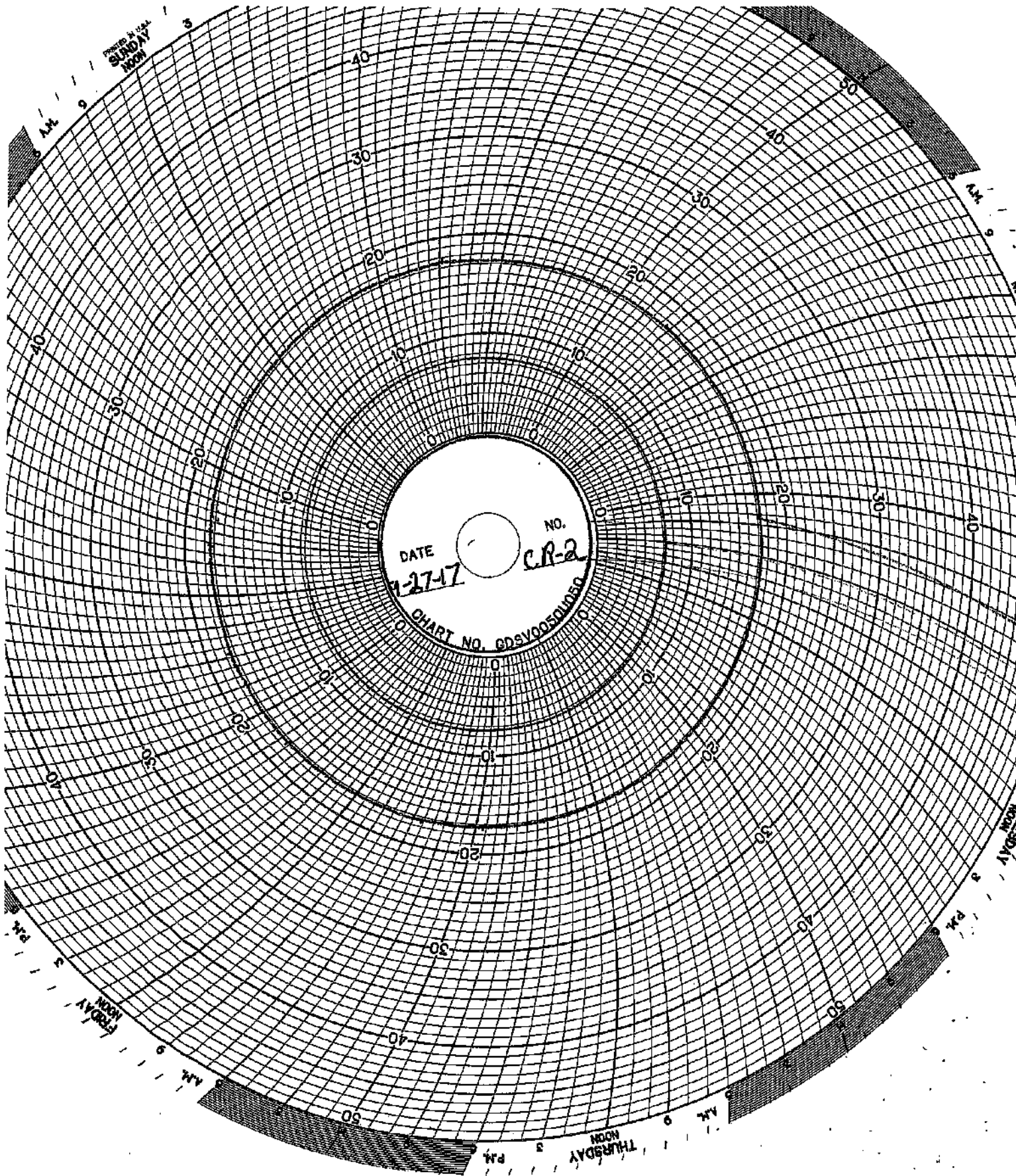
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CHART NO. 6DSV00501060

PRINTED IN U.S.A.
SUNDAY
NOON

DATE 9-20-17
NO. CR-2
CHART NO. 685V0050150



THURSDAY
NOON



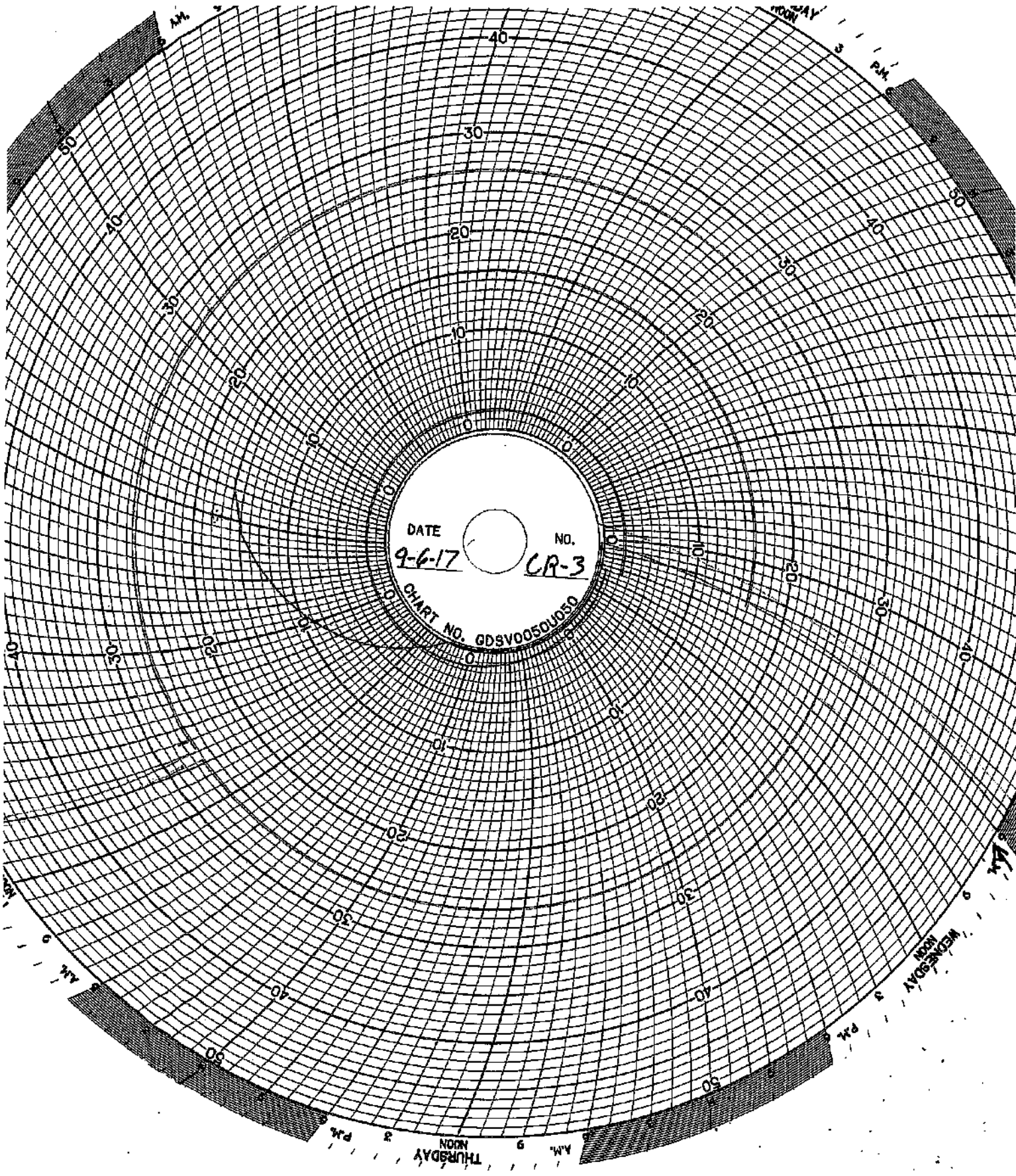
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No. CR-2
CHART NO. 035V00501000

SUNDAY
9 AM

SATURDAY
9 AM

FRIDAY
9 AM

THURSDAY
9 AM

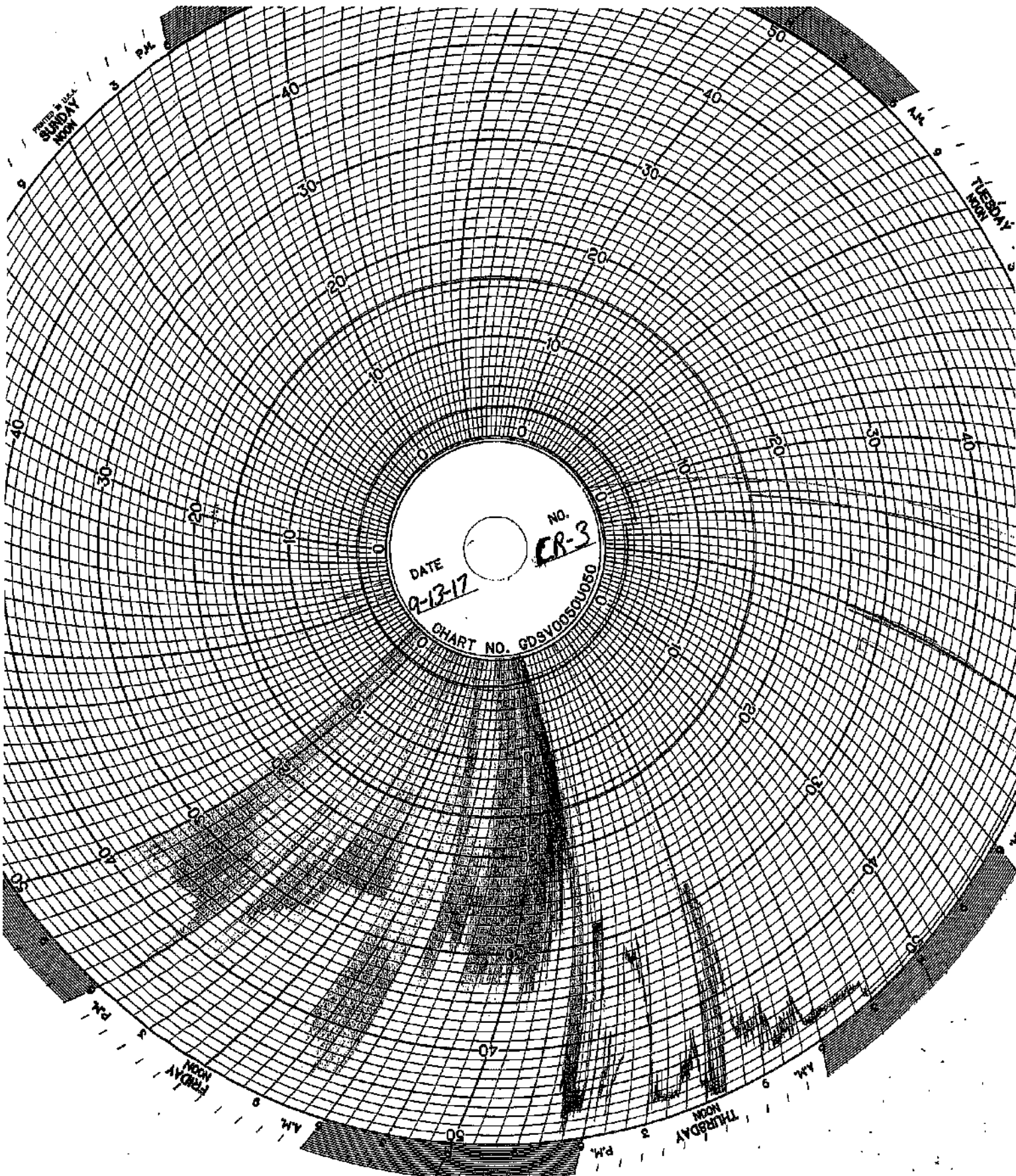


DATE 9-6-17 NO. CR-3

CHART NO. GDSV0050U050

THURSDAY 9 AM

WEDNESDAY 9 AM



DATE 9-13-17
No. CR-3
CHART NO. GDSV050U060

SUNDAY MON
TUESDAY MON

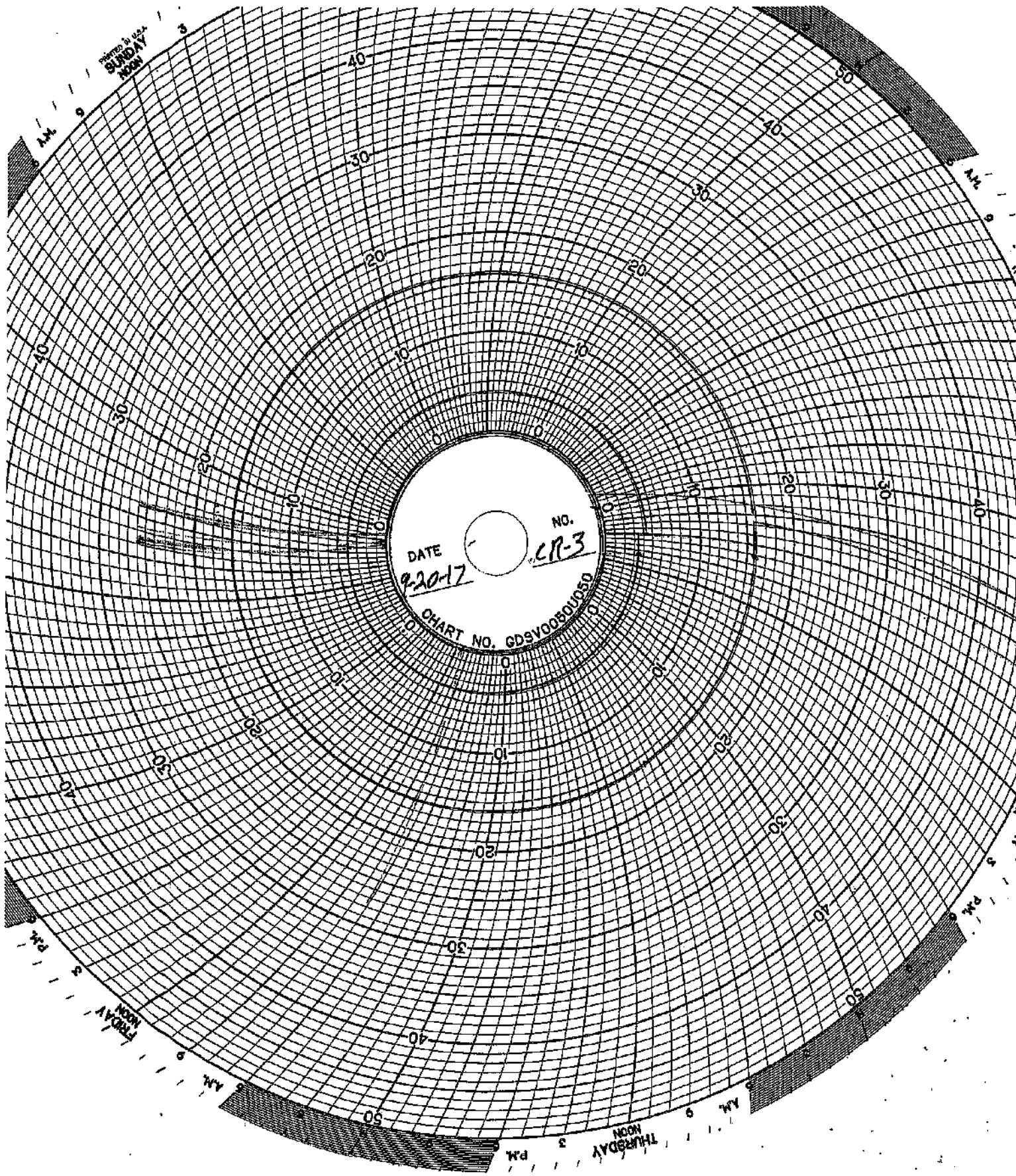
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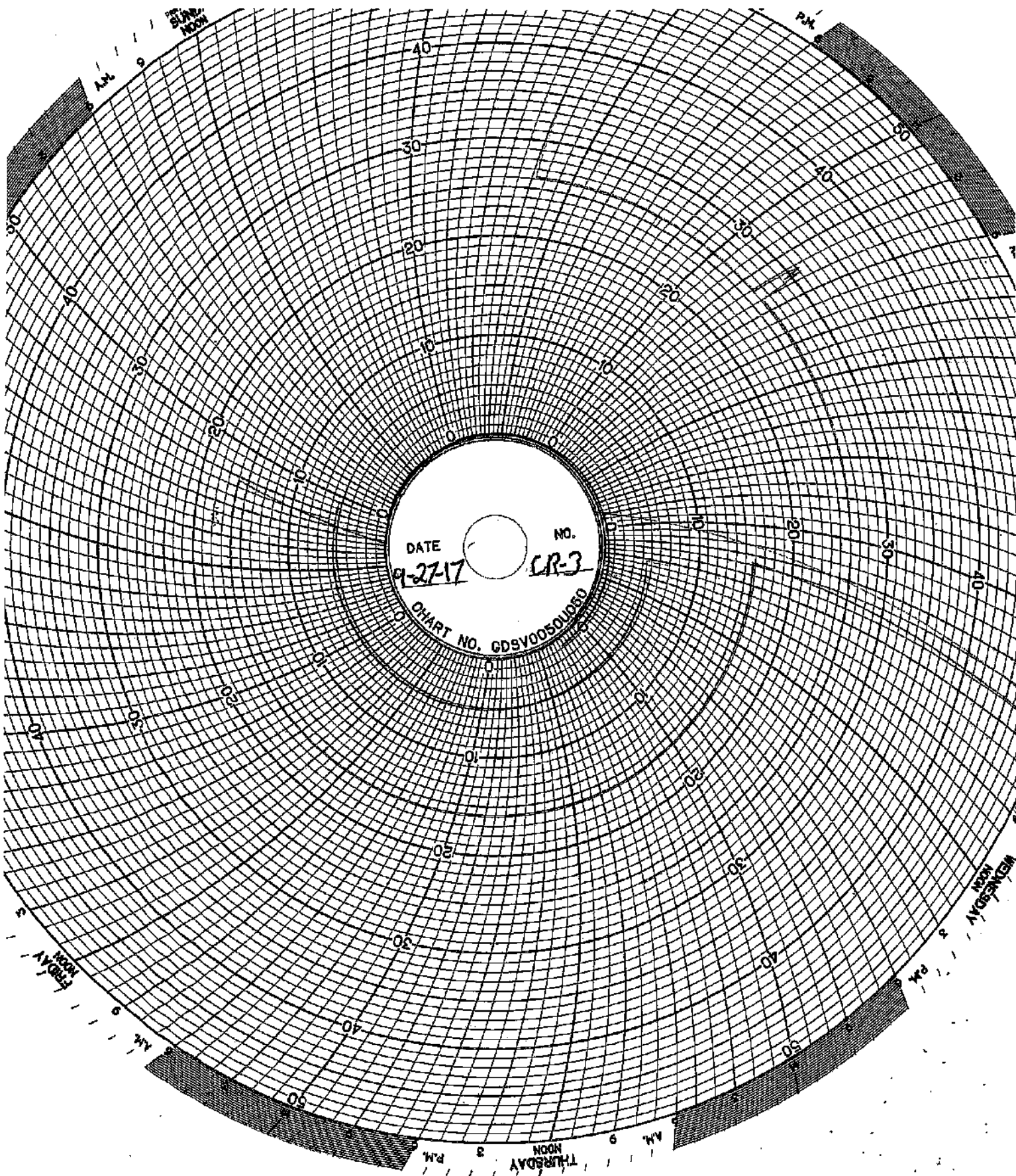
THURSDAY MON

UNITED STATES
NAVY
SUNDAY
NOON

DATE 9-20-17
NO. CR-3

CHART NO. GDSV00501050





DATE 9-27-17 NO. CR-3

CHART NO. GDSV0050100

AM 9 PM 6
MONDAY TUESDAY WEDNESDAY THURSDAY
AM 9 PM 6
AM 9 PM 6
AM 9 PM 6

MAINTENANCE LOG

UIC Monthly Maintenance Log

No Maintenance Performed

CORROSION MONITORING

CORROSION MONITORING COUPONS BASELINE VISUAL DESCRIPTION

November 4, 2013

Fiberglass

The fiberglass coupon is Red Box 2000 type and is 2-1/2 inches long by 1/2 inch wide and 1/4 inches thick. It is a dark orange (rust) in color with a glossy shine on one side a polished look on the opposite side and the cut edges look sanded.

Hastelloy

The hastelloy coupon is identified as C276 with serial number 1. The dimensions of the coupon are 3 inches long by 1/2 inch wide and 1/4 inch thick. The coupon is silver in color with a lightly sandblasted surface.

Stainless Steel

The stainless steel coupon is identified as 316L with serial number C1562. The dimensions of the coupon are 3 inches long by 1/2 inch wide and 1/4 inch thick. The coupon is silver in color with a lightly sandblasted surface.

CORROSION MONITORING COUPONS VISUAL DESCRIPTION

September 28, 2017

Hastelloy Coupon

The Hastelloy coupon is identified as C276 with Serial Number 5. The dimensions of the coupon are 3 inches long by 1/2 inch wide by 1/16 inches thick. The coupon is silver in color with a lightly sandblasted texture. It weighs 13.325 grams.

Stainless Steel Coupon

The Stainless Steel coupon is identified as 316 L with serial number C1564. The dimensions of the coupon are 3 inches long by 1/2 inch wide by 1/16 inches thick. The coupon is silver in color with a pock-marked texture. It weighs 7.352 grams.

Fiberglass Coupon

A new fiberglass coupon was put into service cut from the same stock as the previous stock, Red Box 200 type with dimensions of 2-3/8 inches long by 1-13/16 inch wide by 1/4 inches thick. It is dark orange (rust) in color with similar semi-smooth textures on both sides. Its cut edges appear sanded. It weighs 18.060 grams.

**CORROSION MONITORING PLAN
COUPON SUMMARY**

Date	Hastelloy (C267)	Stainless Steel (316L)	Fiberglass (Redbox)	
12/19/2013	13.330 g	10.848 g	7.309 g	Initial Mass @ start up
2/21/2014	13.329 g	10.846 g	7.306 g	
3/10/2014	13.327 g	10.845 g	7.300 g	
4/18/2014	13.324 g	10.841 g	7.272 g	
5/30/2014	13.328 g	10.818 g	7.226 g	
6/30/2014	13.321 g	10.337 g	7.196 g	
7/11/2014	13.323 g	10.304 g	7.196 g	
8/12/2014	13.328 g	10.045 g	7.182 g	
9/17/2014	13.321 g	9.997 g	7.090 g	
10/30/2014	13.321 g	9.387 g	7.075 g	
11/21/2014	13.320 g	9.386 g	7.069 g	
12/19/2014	13.321 g	9.315 g	7.084 g	
1/12/2015	13.321 g	9.289 g	7.063 g	
2/23/2015	13.339 g	9.286 g	7.005 g	
3/31/2015	13.339 g	9.286 g	7.005 g	
4/27/2015	13.335 g	9.130 g	6.852 g	
5/21/2015	13.336 g	9.124 g	6.809 g	
6/12/2015	13.334 g	9.126 g	6.819 g	
7/27/2015	13.337 g	9.127 g	6.818 g	
8/26/2015	13.337 g	9.022 g	6.780 g	
9/21/2015	13.336 g	8.987 g	6.792 g	
10/19/2015	13.335 g	8.985 g	6.797 g	
11/16/2015	13.334 g	8.982 g	6.788 g	
12/17/2015	13.334 g	8.933 g	6.791 g	
1/29/2016	13.334 g	8.931 g	6.788 g	New stainless steel coupon
2/16/2016	13.332 g	8.799 g	6.757 g	
3/31/2016	13.339 g	9.286 g	7.005 g	
4/22/2016	13.333 g	8.590 g	6.744 g	
5/31/2015	13.334 g	6.084 g	6.784 g	
6/30/2016	13.328 g	10.942 g	6.793 g	
8/3/2016	13.326 g	10.529 g	6.743 g	
8/29/2016	13.325 g	10.020 g	6.723 g	
10/27/2016	13.325 g	8.765 g	6.708 g	
11/29/2016	13.327 g	8.571 g	6.740 g	
12/12/2016	13.323 g	8.223 g	6.717 g	
1/3/2017	13.325 g	8.059 g	6.712 g	
2/28/2017	13.324 g	7.634 g	6.727 g	
3/24/2017	13.325 g	7.370 g	6.732 g	
4/28/2017	13.325 g	6.736 g	6.736 g	
5/11/2017	13.323 g	7.352 g	6.689 g	
6/12/2017	13.323 g	7.357 g	6.689 g	
7/5/2017	13.323 g	7.355 g	6.689 g	
8/30/2017	13.324 g	7.353 g	18.105 g	
9/28/2017	13.325 g	7.352 g	18.060 g	

GHSQUIERE PLASTIC TESTING, INC.

20480 HARPER AVENUE
HARPER WOODS, MI 48225
PHONE (313) 865-3636
FAX (313) 865-1771

Report Date: November 15, 2013
Test Date: October 15 - November 14, 2013

Report #1310-77651
Performed for:
Environmental Geo-Technologies
28470 Citrin Drive
Romulus, MI 48174

Attention: Mr. Don Anderson

WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.
(P. O. #Credit Card).

WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2583-13. One specimen was tested.

RESULTS:


The following determination was made based upon the above test:

BARCOL HARDNESS

	<u>Hardness</u>
Specimen 1	90

Specimen is being returned with this report for further evaluation.

GHSQUIERE PLASTIC TESTING, INC.


M. W. Ghesquiere
President

HWG/kni

Our letters and reports are for the exclusive use of the client to whom they are addressed, and shall not be reproduced except in full without our written approval. Our letters and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar products. The letters and reports and the name of Ghesquiere Plastic Testing, Inc., are not to be used under any circumstances in advertising to the general public. Samples, extra and related test materials will be destroyed 30 days after the date of the final report unless the client indicates otherwise in writing.

TOTAL 1 PAGES

GHESEQUIERE PLASTIC TESTING, INC.

20450 HARPER AVENUE
HARPER WOODS, MI 48225
PHONE (313) 885-3535
FAX (313) 885-1771

Report Date: February 17, 2014
Test Date: February 14 - 17, 2014

Report #1402-78036
Performed for:
Environmental Geo-Technologies
28470 Citrin Drive
Rexwulst, MI 48174

Attention: Mr. Don Anderson

WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2563-13. One specimen was tested.

RESULTS:

The following determination was made based upon the above test:

BARCOL HARDNESS

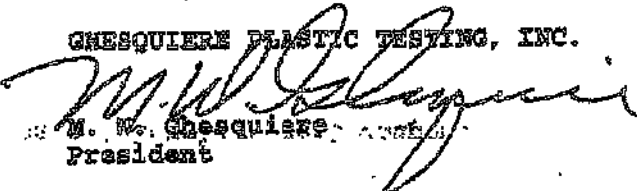
Hardness

Specimen 1: 90

Specimen was returned to the client on February 17, 2014.

MWG/dm

GHESEQUIERE PLASTIC TESTING, INC.


M. W. Ghesquiere
President

MWG/dm

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TOTAL 1 PAGES

Ghesquiere Plastic Testing, Inc.

20450 HARPER AVENUE
HARPER WOODS, MI 48225
PHONE (313) 885-3535
FAX (313) 885-1771

Report Date: June 16, 2014
Test Date: June 13 - 16, 2014

Report #1406-78499
Performed for:
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Attention: Mr. Don Anderson

WORK REQUESTED:

Perform Barcol Hardness test on sample submitted.

DESCRIPTION OF SAMPLE:

Sample submitted was identified as a fiberglass test coupon.

(P. O. #Credit Card).

WORK PERFORMED:

Test specimen was prepared as necessary and conditioned for a minimum of 24 hours at standard laboratory conditions prior to testing.

Barcol Hardness test was performed in accordance with the procedures of ASTM D2583-13. One specimen was tested.

RESULTS:

The following determination was made based upon the above test:

BARCOL HARDNESS

Hardness

Specimen 1

85

Specimen was returned to the client June 16, 2014.

Ghesquiere Plastic Testing, Inc.


M. W. Ghesquiere
President

MWG/dm



October 2, 2014

TEST REPORT

PN 118325

PO Attn: John Frost

PLASTICS TESTING DEPARTMENT

Prepared For:

John Frost
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Prepared By:

Melissa Martin
Sr. Project Technician

Approved By:

Jim Drummond
Physical & Plastics Testing, Manager



An A2LA ISO 17025 Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02
ISO 9001:2008 Registered

ISO 9001:2008
Registered

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www.ardl.com

2887 Glouchier Rd. | Akron, Ohio 44305 | answers@ardl.com
Toll Free (800) 830-ARDL | Worldwide (330) 794-6600 | Fax (330) 794-8510



Testing. Development. Problem Solving.

October 2, 2014

John Frost
Environmental Geo-Technologies, LLC

Page 2 of 2
PN118325

SUBJECT: Barcol Hardness on one material.
PO# Attn: John Frost

RECEIVED: One small section identified as; Fiberglass Coupon.

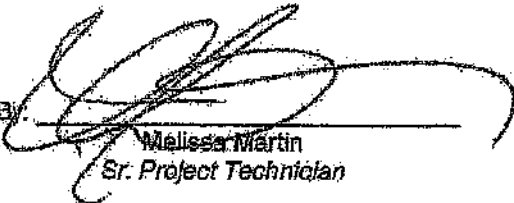
BARCOL HARDNESS ASTM D 2583-13a

Results

Barcol Hardness, Instant

97

Prepared By:


Melissa Martin
Sr. Project Technician

Approved By:


Scott W. Yates
Plastics Testing Assistant Manager

www.ardl.com

2887 Gilchrist Rd. | Akron, Ohio 44305 | answers@ardl.com
Toll Free (800) 830-ARDL | Worldwide (330) 794-6600 | Fax (330) 794-6610



Progress Through Innovation, Technology and Customer Satisfaction

October 22, 2015

• TEST REPORT •

PN 125322
PO 00154

PLASTICS TESTING DEPARTMENT

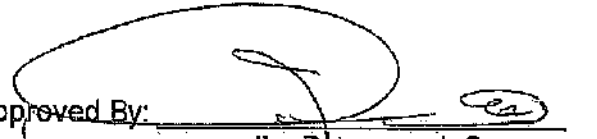
Prepared For:

John Frost
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Prepared By:


Melissa Martin
Sr. Project Technician

Approved By:


Jim Drummond, Sr.
Physical & Plastic Testing, Manager



An A2LA ISO 17025 Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02
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Fax (330) 794-6610 | Worldwide (330) 794-6600



October 22, 2015

John Frost
Environmental Geo-Technologies, LLC

Page 2 of 2
PN 125322

SUBJECT: Barcol Hardness on one material.

RECEIVED: One small section identified as; Fiberglass Coupon.

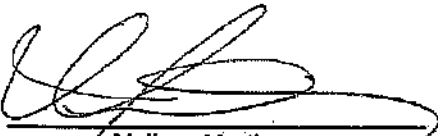
BARCOL HARDNESS ASTM D 2583-13a
Instant Reading

Results

Barcol Hardness, Instant

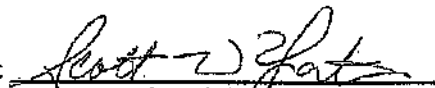
96

Prepared By:



Melissa Martin
Sr. Project Technician

Approved By:



Scott W. Yates
Plastics Testing Assistant Manager

to



Progress Through Innovation, Technology and Customer Satisfaction

December 12, 2016

TEST REPORT

PN 132662
PO

PLASTICS TESTING DEPARTMENT

Prepared For:

John Frost
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Prepared By:


Melissa Martin
Senior Project Technician

Approved By:


Jim Drummond
Physical Testing, Manager

Rev 041916



An A2LA ISO 17025 Accredited Testing Laboratory — Certificate Numbers 255.01 & 255.02
ISO 9001:2008 Registered

ISO 9001:2008
Registered

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December 12, 2016

John Frost
Environmental Geo-Technologies, LLC

Page 2 of 2
PN 132662


SUBJECT: Barcol Hardness on one (1) material.

RECEIVED: One (1) small section identified as; Fiberglass Coupon.

BARCOL HARDNESS ASTM D 2583-13a
Instant Reading

RESULTS

Barcol Hardness, Instant 96

Prepared By: 
Melissa Martin
Senior Project Technician

Approved By: 
Scott Yates
Plastics Testing, Assistant Manager

wk

ARDL is ISO 17025 accredited by A2LA for the test methods listed on the certificates referenced on page one. NOTE: Non-ISO 17025 accredited test methods are designated with the ^ symbol to differentiate from ISO 17025 accredited methods in the body of the test report.

**INJECTION
FINGERPRINTS**

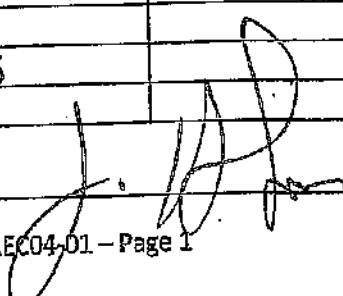
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00 am	9/29/17
Receiving ID#	109291701	
Manifest#	Line:	
Land Ban Cert Included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.F.	
Sampled by	A.W.	

COPY

Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.37
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	65°F		
Conductivity	25.0 umS		
% Solids	5.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	4.0		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	11:41 AM	9/28/17
Receiving ID#	109781702	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	[Signature]	

COPY

Compatible? (RT#)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	1.3		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.08		TDS	5.09
Physical Description			Resistivity	
Stream Consistency	<input type="radio"/> Yes	<input type="radio"/> No	Sulfate	
Oil In Sample	<input type="radio"/> Yes	<input type="radio"/> No		
Temperature	74°F			
Conductivity	100.6 μS			
% Solids	11.0			
Turbidity	<input type="radio"/> Yes	<input type="radio"/> No		
Color (visual)				
TSS (%)	6.0			
Radiation Screen (as needed)				
Lab Signature	[Signature]			

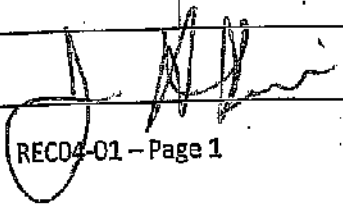
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00 am	09 128 117
Receiving ID#	E09281701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H	
Sampled by	AW	

COPY

Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.06	TDS	3.3%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	71°F		
Conductivity	65.2 mS		
% Solids	3.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

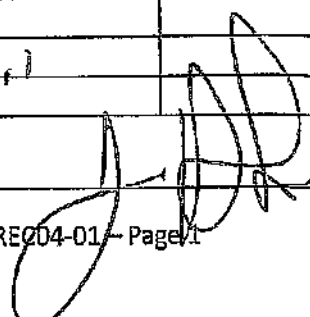
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	5:43 pm	09/27/17
Receiving ID#	FD977702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	MVS	

COPY

LAB INFORMATION	Characteristics	Characteristics	Characteristics
Compatible? (RT#)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	>140		Magnesium
pH (S.U.)	0.7		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.16		TDS
Physical Description			Resistivity
Stream Consistency	<input type="radio"/> Yes	<input type="radio"/> No	Sulfate
Oil in Sample	<input type="radio"/> Yes	<input type="radio"/> No	
Temperature	77°F		
Conductivity	246.5 mS		
% Solids	12.3		
Turbidity	<input type="radio"/> Yes	<input type="radio"/> No	
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

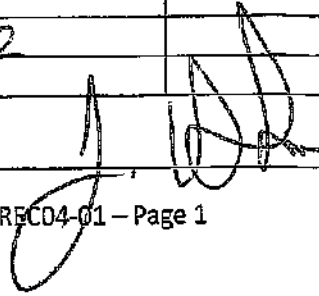
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	11:00am	09/27/17
Receiving ID#	10921701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	PW	

COPY

TEST INFORMATION	Yes	No	Other Parameters	Value
Compatible? (RT#)	(Yes)	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	>140		Magnesium	
pH (S.U.)	7.3		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.02		TDS	1.1%
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	74°F			
Conductivity	20.9 mS			
% Solids	1.3			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	0.2			
Radiation Screen (as needed)				
Lab Signature				

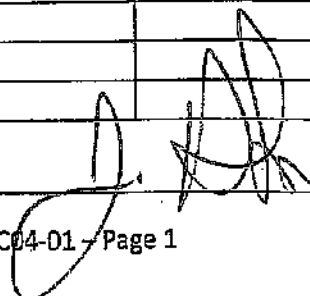
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	11:46 AM	09126117
Receiving ID#		309261702
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by		J.H.
Sampled by		B

COPY

ANALYSIS	UNIT	RESULT	ANALYSIS	UNIT	RESULT
Compatible? (RT#)	Yes	No	Barium		
PCBs (ppm)(Oily Waste Only)?			Calcium		
TOC (ppm)(CC Waste Only)?			Total Iron		
Flash Point (°F)	>140		Magnesium		
pH (S.U.)	6.7		Sodium Chloride		
Cyanides? (mg/L)			Bicarbonate		
Sulfides? (ppm)			Carbonate		
Specific Gravity	1.02		TDS		2.07
Physical Description			Resistivity		
Stream Consistency	Yes	No	Sulfate		
Oil in Sample	Yes	No			
Temperature	83°F				
Conductivity	39.8ms				
% Solids	2.0				
Turbidity	Yes	No			
Color (visual)					
TSS (%)	<0.1				
Radiation Screen (as needed)					
Lab Signature					

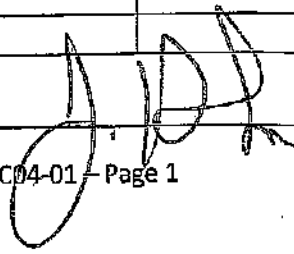
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00 am	09 / 26 / 17
Receiving ID#	209 26 17 01	
Manifest#	Line:	
Land Ban Cert Included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	AW	

COPY

Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.5	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.97
Physical Description		Resistivity	
Stream Consistency	<input type="radio"/> Yes <input type="radio"/> No	Sulfate	
Oil in Sample	<input type="radio"/> Yes <input type="radio"/> No		
Temperature	74°F		
Conductivity	38.9 mS		
% Solids	2.0		
Turbidity	<input type="radio"/> Yes <input type="radio"/> No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

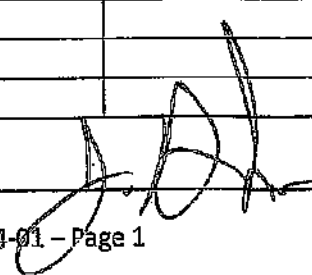
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	3:11 pm	09/22/17
Receiving ID#	T09221702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	M.B.	

COPY

Waste Type	Oil	Oil	Oil
Compatible? (RT#)	Yes	No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	> 140		Magnesium
pH (S.U.)	0.6		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.10		TDS
Physical Description			Resistivity
Stream Consistency	Yes	No	Sulfate
Oil in Sample	Yes	No	
Temperature	74°F		
Conductivity	> 400.0 mS		
% Solids	24.6		
Turbidity	Yes	No	
Color (visual)	-		
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

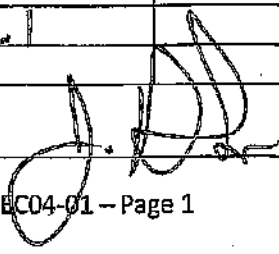
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	4:30 AM	09/22/17
Receiving ID#	109221701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	T.E.	

COPY

LAB INFORMATION		OILS/PAH'S ONLY	
Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	2.6	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.04	TDS	2.52
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	74°F		
Conductivity	51.0 mS		
% Solids	2.5		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

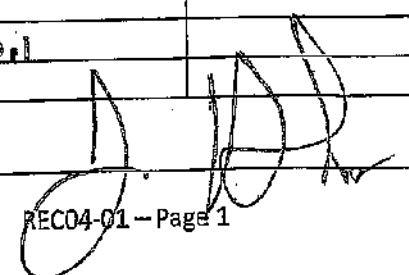
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12.06am	09 / 21 / 17
Receiving ID#	Z09211701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	AW	

COPY

Compatible? (RT#)	<input checked="" type="checkbox"/> Yes	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	2140		Magnesium	
pH (S.U.)	7.0		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.02		TDS	2.07
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	74°F			
Conductivity	39.2 mS			
% Solids	2.0			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	<0.1			
Radiation Screen (as needed)				
Lab Signature				

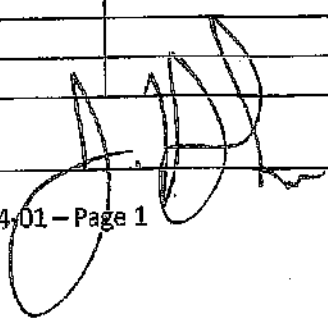
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	9:00 pm	09 / 20 / 17
Receiving ID#	109 201702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	AW	

COPY

Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	7.0	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.9
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	74°F		
Conductivity	38.6 mS		
% Solids	2.1		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.2		
Radiation Screen (as needed)			
Lab Signature			

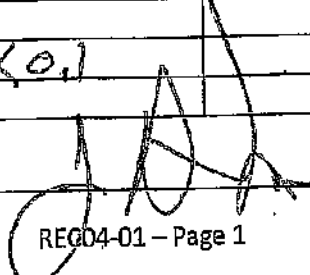
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	12.00 <small>cm</small>	09 / 20 / 17
Receiving ID#	I 09201701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	AW	

COPY

Compatible? (RT#)	Yes	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	6.9		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.02		TDS	2.07
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	74°F			
Conductivity	40.1 <small>ms</small>			
% Solids	2.0			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	< 0.1			
Radiation Screen (as needed)				
Lab Signature				

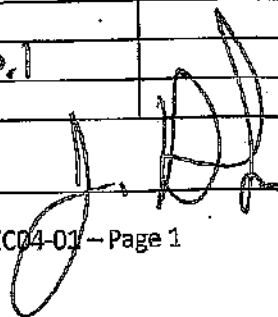
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	3:04 pm	09/19/17
Receiving ID#	I09191702	
Manifest#	Line:	
Land Ban Cert Included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	MB	

COPY

WATER		SOLIDS	
Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 170	Magnesium	
pH (S.U.)	11.4	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.04	TDS	3.07
Physical Description		Resistivity	
Stream Consistency	Yes <input type="radio"/> No <input type="radio"/>	Sulfate	
Oil in Sample	Yes <input type="radio"/> No <input type="radio"/>		
Temperature	74°F		
Conductivity	59.5mS		
% Solids	3.0		
Turbidity	Yes <input type="radio"/> No <input type="radio"/>		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

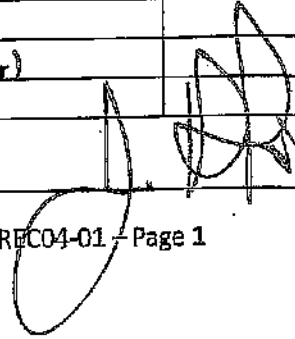
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:30 pm	09 / 19 / 17
Receiving ID#	709191701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	PW	

COPY

Compatible? (RT#)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	0.6		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.11		TDS	12.79
Physical Description			Resistivity	
Stream Consistency	<input type="radio"/> Yes	<input type="radio"/> No	Sulfate	
Oil in Sample	<input type="radio"/> Yes	<input type="radio"/> No		
Temperature	74°F			
Conductivity	254.3 mS			
% Solids	12.7			
Turbidity	<input type="radio"/> Yes	<input type="radio"/> No		
Color (visual)				
TSS (%)	< 0.1			
Radiation Screen (as needed)				
Lab Signature				

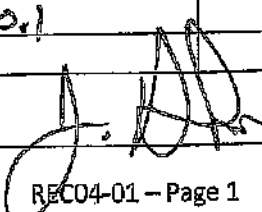
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	10:45pm 09 / 18 / 17
Receiving ID#	109181702
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	PNW

COPY

Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	0.9	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.09	TDS	9.29
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	74°F		
Conductivity	185.2 mS		
% Solids	9.2		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	08/18/17 2:00 PM 09/18/17
Receiving ID#	109181701
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	[Signature]

COPY

Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	2140	Magnesium	
pH (S.U.)	0.8	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.07	TDS	13.42
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	75°F		
Conductivity	267.0 mS		
% Solids	13.4		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature	[Signature]		

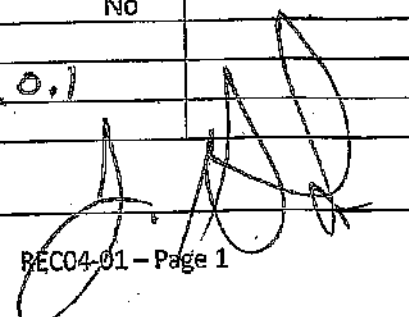
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	8:08pm 09/17/17
Receiving ID#	209171701
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	V.F.
Sampled by	AW

COPY

PROPERTY	UNIT	TEST RESULT	PROPERTY	UNIT	TEST RESULT
Compatible? (RT#)	(Yes) No		Barium		
PCBs (ppm)(Oily Waste Only)?			Calcium		
TOC (ppm)(CC Waste Only)?			Total Iron		
Flash Point (°F)	> 140		Magnesium		
pH (S.U.)	6.8		Sodium Chloride		
Cyanides? (mg/L)			Bicarbonate		
Sulfides? (ppm)			Carbonate		
Specific Gravity	1.02		TDS		1.9
Physical Description			Resistivity		
Stream Consistency	Yes No		Sulfate		
Oil in Sample	Yes No				
Temperature	74°F				
Conductivity	37.8 mS				
% Solids	1.9				
Turbidity	Yes No				
Color (visual)					
TSS (%)	< 0.1				
Radiation Screen (as needed)					
Lab Signature					

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	10:00AM	09/15/17
Receiving ID#	F09151702	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	<i>[Signature]</i>	

COPY

RECEIVING		ANALYSIS	
Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.1	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.02
Physical Description		Resistivity	
Stream Consistency	Yes <input type="radio"/> No <input type="radio"/>	Sulfate	
Oil in Sample	Yes <input type="radio"/> No <input type="radio"/>		
Temperature	75°F		
Conductivity	19.0 mS		
% Solids	1.2		
Turbidity	Yes <input type="radio"/> No <input type="radio"/>		
Color (visual)			
TSS (%)	0.2		
Radiation Screen (as needed)			
Lab Signature	<i>[Signature]</i>		

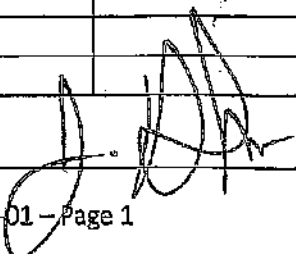
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	2:00am	09/15/17
Receiving ID#	T02151701	
Manifest# Line:		
Land Ban Cert Included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	M.W.	

COPY

Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	0.4	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.12	TDS	31.82
Physical Description		Resistivity	
Stream Consistency	<input type="radio"/> Yes <input type="radio"/> No	Sulfate	
Oil in Sample	<input type="radio"/> Yes <input type="radio"/> No		
Temperature	75°F		
Conductivity	> 400.0 μS		
% Solids	31.8		
Turbidity	<input type="radio"/> Yes <input type="radio"/> No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

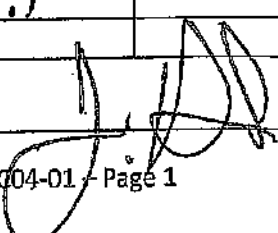
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00 PM 09/14/17
Receiving ID#	Z09141701
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	DW

COPY

WASTE CHARACTERISTICS		Other Parameters	
Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	12.0	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.06	TDS	3.72
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	72°F		
Conductivity	75.6 mS		
% Solids	3.7		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

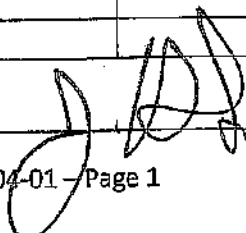
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	12:00am 09/15/17
Receiving ID#	709151701
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	AW

COPY

WASTE CHARACTERIZATION		OTHER TESTS ONLY	
Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	>140	Magnesium	
pH (S.U.)	5.3	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.04	TDS	7.17
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	72°F		
Conductivity	22.9ms		
% Solids	13.1		
Turbidity	Yes No		
Color (visual)			
TSS (%)	10.0		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	5.08	9/12/17
Receiving ID#	109121702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	[Signature]	

COPY

LUBRICATING OIL		OTHER FLUIDS	
Compatible? (RT#)	<input checked="" type="checkbox"/> Yes	No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	>140		Magnesium
pH (S.U.)	4.5		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.04		TDS
Physical Description			Resistivity
Stream Consistency	Yes	No	Sulfate
Oil in Sample	Yes	No	
Temperature	73°F		
Conductivity	53.8mS		
% Solids	2.7		
Turbidity	Yes	No	
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature	[Signature]		

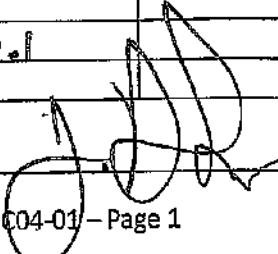
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:30am	09/12/17
Receiving ID#	209121701	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.P.	
Sampled by	DW	

COPY

ENVIRONMENTAL		CHEMICALS	
Compatible? (RT#)	Yes	No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	>140		Magnesium
pH (S.U.)	5.6		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.01		TDS
Physical Description			Resistivity
Stream Consistency	Yes	No	Sulfate
Oil in Sample	Yes	No	
Temperature	72°F		
Conductivity	36.1ms		
% Solids	1.8		
Turbidity	Yes	No	
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

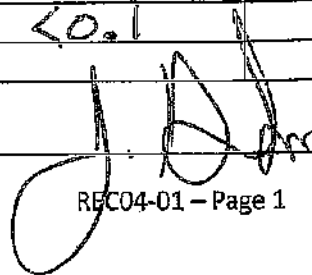
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	2:16 PM	9 / 11 / 17
Receiving ID#	109111702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	B	

COPY

Liquid Samples		Oil Based Samples Only	
Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.7	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.00	TDS	0.72
Physical Description		Resistivity	
Stream Consistency	Yes <input type="radio"/> No <input type="radio"/>	Sulfate	
Oil in Sample	Yes <input type="radio"/> No <input type="radio"/>		
Temperature	71°F		
Conductivity	14.4 mS		
% Solids	0.7		
Turbidity	Yes <input type="radio"/> No <input type="radio"/>		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

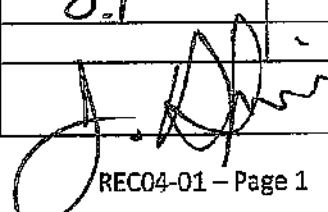
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00am	09/11/17
Receiving ID#	209111701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	M	

COPY

LAB INFORMATION		FIELD INFORMATION	
Always Completed		Completed by Site	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	140	Magnesium	
pH (S.U.)	6.9	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.8%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	71°F		
Conductivity	35.4 mS		
% Solids	1.8		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

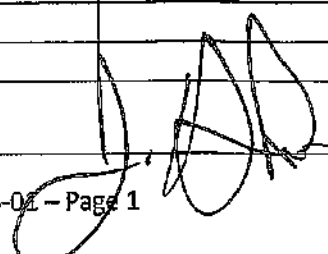
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	8:10 pm	09/10/17
Receiving ID#	I09101701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J. J.	
Sampled by	RW	

COPY

ANALYSIS		FIELD TESTS	
Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.8	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	187
Physical Description		Resistivity	
Stream Consistency	<input type="radio"/> Yes <input type="radio"/> No	Sulfate	
Oil in Sample	<input type="radio"/> Yes <input type="radio"/> No		
Temperature	70°F		
Conductivity	35.6 mS		
% Solids	1.8		
Turbidity	<input type="radio"/> Yes <input type="radio"/> No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00 PM	09/08/17
Receiving ID#	10908021702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	J.H.	

COPY

LAB INFORMATION		Other Elements	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.8	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.82
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	70°F		
Conductivity	34.705		
% Solids	1.8		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.2		
Radiation Screen (as needed)			
Lab Signature	J.H.		

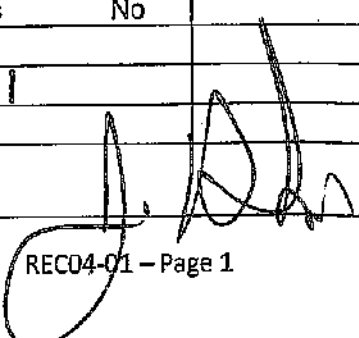
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	5:00am	01/98/17
Receiving ID#	Z09081701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	SAJ	
Sampled by	AV	

COPY

Compatible? (RT#)	Yes	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	5.9		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.02		TDS	1.9%
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	70.4			
Conductivity	37.6ms			
% Solids	1.9			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	0.1			
Radiation Screen (as needed)				
Lab Signature				

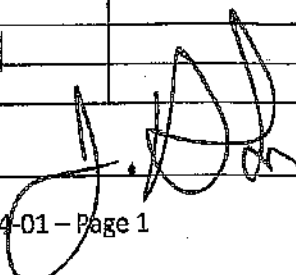
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10:00 09 107 117
Receiving ID#	209 07 17 05
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	AW

COPY

LAB INFORMATION		OTHER DATA	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	>140	Magnesium	
pH (S.U.)	0.2	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.10	TDS	25.6%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	71°F		
Conductivity	>400.0ms		
% Solids	25.6		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

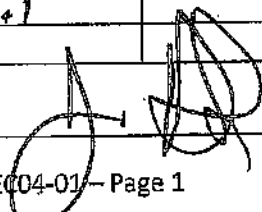
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

RECEIVING INFORMATION	
Date	10:00 p.m. 09/07/17
Receiving ID#	209071704
Manifest# Line:	
Land Ban Cert included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time in	
Time out	
Received by	J.H.
Sampled by	DW

COPY

LAB INFORMATION		OTHER DATA ONLY	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	>140	Magnesium	
pH (S.U.)	0.8	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.10	TDS	25.79
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	70°F		
Conductivity	>400.0ms		
% Solids	25.7		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

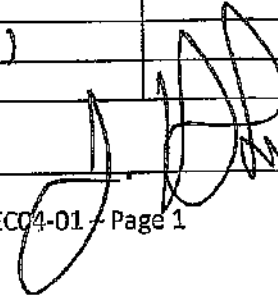
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	2:28 PM	02/07/17
Receiving ID#	E09011703	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	G.H.	
Sampled by	BS	

COPY

Waste Characterization	Physical Properties	Chemical Properties
Compatible? (RT#)	<input checked="" type="radio"/> Yes No	Barium
PCBs (ppm)(Oily Waste Only)?		Calcium
TOC (ppm)(CC Waste Only)?		Total Iron
Flash Point (°F)	140	Magnesium
pH (S.U.)	0.8	Sodium Chloride
Cyanides? (mg/L)		Bicarbonate
Sulfides? (ppm)		Carbonate
Specific Gravity	1.12	TDS
Physical Description		Resistivity
Stream Consistency	Yes No	Sulfate
Oil in Sample	Yes No	
Temperature	72°F	
Conductivity	239.4 mS	
% Solids	12.0	
Turbidity	Yes No	
Color (visual)		
TSS (%)	<0.1	
Radiation Screen (as needed)		
Lab Signature		

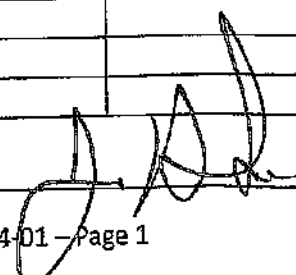
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	10:00 AM	09/07/17
Receiving ID#	E09071702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H	
Sampled by	Jim	

COPY

TEST RESULTS		Analytical Data	
Compatible? (RT#)	Yes	No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	> 140		Magnesium
pH (S.U.)	0.7		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.11		TDS
Physical Description			Resistivity
Stream Consistency	Yes	No	Sulfate
Oil in Sample	Yes	No	
Temperature	71°F		
Conductivity	213.6 μS		
% Solids	10.7		
Turbidity	Yes	No	
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

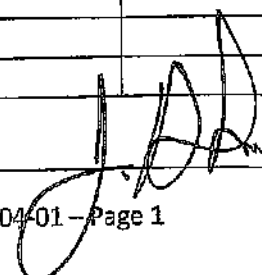
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	2:00 am	09/07/17
Receiving ID#	109071701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	D.W.	

COPY

Waste Properties	Site	Site	Site
Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	>140	Magnesium	
pH (S.U.)	5.0	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.08	TDS	4.57
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	71°F		
Conductivity	889 μS		
% Solids	4.5		
Turbidity	Yes No		
Color (visual)			
TSS (%)	<0.1		
Radiation Screen (as needed)			
Lab Signature			

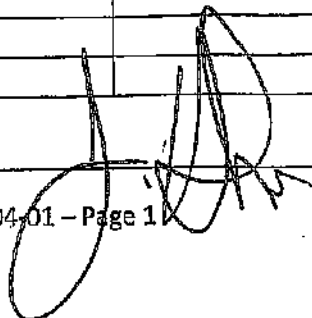
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	2:00 PM 09 / 06 / 17	
Receiving ID#	109061702	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	JH	
Sampled by	DB	

COPY

LAB INFORMATION	ANALYSIS	CLIENT INFORMATION
Compatible? (RT#)	<input checked="" type="radio"/> Yes No	Barium
PCBs (ppm)(Oily Waste Only)?		Calcium
TOC (ppm)(CC Waste Only)?		Total Iron
Flash Point (°F)	> 140	Magnesium
pH (S.U.)	6.7	Sodium Chloride
Cyanides? (mg/L)		Bicarbonate
Sulfides? (ppm)		Carbonate
Specific Gravity	1.02	TDS
Physical Description		Resistivity
Stream Consistency	Yes No	Sulfate
Oil in Sample	Yes No	
Temperature	81°F	
Conductivity	33.7 mS	
% Solids	1.7	
Turbidity	Yes No	
Color (visual)		
TSS (%)	< 0.1	
Radiation Screen (as needed)		
Lab Signature		

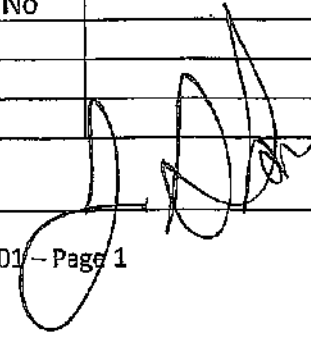
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	12:00am	09 / 06 / 17
Receiving ID#	109061701	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	A.H.	

COPY

PROPERTY		Oil and Grease	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.4	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.3
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	72°F		
Conductivity	25.0 mS		
% Solids	1.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

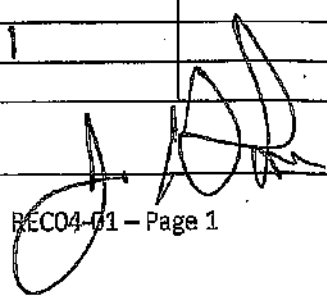
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	11:30 pm	09/05/17
Receiving ID#	E09051703	
Manifest# Line:		
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.H.	
Sampled by	AW	

COPY

PROPERTY	UNIT	TEST RESULT	PROPERTY	UNIT	TEST RESULT
Compatible? (RT#)		(Yes) No	Barium		
PCBs (ppm)(Oily Waste Only)?			Calcium		
TOC (ppm)(CC Waste Only)?			Total Iron		
Flash Point (°F)		> 140	Magnesium		
pH (S.U.)		6.5	Sodium Chloride		
Cyanides? (mg/L)			Bicarbonate		
Sulfides? (ppm)			Carbonate		
Specific Gravity		1.02	TDS		1.29
Physical Description			Resistivity		
Stream Consistency		Yes No	Sulfate		
Oil in Sample		Yes No			
Temperature		71°F			
Conductivity		23.9 mS			
% Solids		1.2			
Turbidity		Yes No			
Color (visual)					
TSS (%)		0.1			
Radiation Screen (as needed)					
Lab Signature					

FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	13:00	09/05/17
Receiving ID#	IL09051702	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by		

COPY

PROPERTY		TEST RESULTS	
Compatible? (RT#)	Yes	No	Barium
PCBs (ppm)(Oily Waste Only)?			Calcium
TOC (ppm)(CC Waste Only)?			Total Iron
Flash Point (°F)	> 140		Magnesium
pH (S.U.)	10.0		Sodium Chloride
Cyanides? (mg/L)			Bicarbonate
Sulfides? (ppm)			Carbonate
Specific Gravity	1.01		TDS
Physical Description			Resistivity
Stream Consistency	Yes	No	Sulfate
Oil in Sample	Yes	No	
Temperature	74°F		
Conductivity	12.9		
% Solids	0.5		
Turbidity	Yes	No	
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

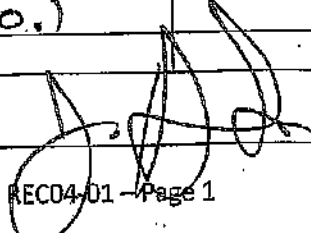
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	12:02am 09/05/17
Receiving ID#	1090S1701
Manifest# Line:	
Land Ban Cert Included	Yes No
EGT Approval #	
Generator	
Client	
Transporter	
Time In	
Time out	
Received by	J. J.
Sampled by	A. W.

COPY

ANALYSIS		RESULTS	
Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 148	Magnesium	
pH (S.U.)	6.5	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.00	TDS	0.3%
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	73°F		
Conductivity	0.5 mS		
% Solids	0.3		
Turbidity	Yes No		
Color (visual)			
TSS (%)	< 0.1		
Radiation Screen (as needed)			
Lab Signature			

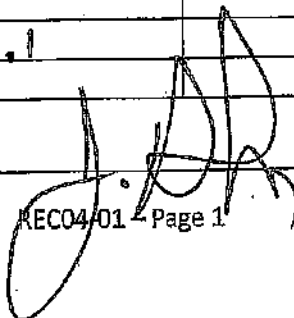
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	8:20pm	08/04/17
Receiving ID#	209041701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time in		
Time out		
Received by	J.F.	
Sampled by	AW	

COPY

Compatible? (RT#)	Yes	No	Barium	
PCBs (ppm)(Oily Waste Only)?			Calcium	
TOC (ppm)(CC Waste Only)?			Total Iron	
Flash Point (°F)	> 140		Magnesium	
pH (S.U.)	6.5		Sodium Chloride	
Cyanides? (mg/L)			Bicarbonate	
Sulfides? (ppm)			Carbonate	
Specific Gravity	1.02		TDS	1.42
Physical Description			Resistivity	
Stream Consistency	Yes	No	Sulfate	
Oil in Sample	Yes	No		
Temperature	73°F			
Conductivity	27.0 mS			
% Solids	1.4			
Turbidity	Yes	No		
Color (visual)				
TSS (%)	0.1			
Radiation Screen (as needed)				
Lab Signature				

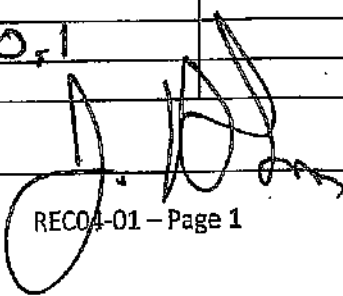
FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	6:36 Am	9/0/17
Receiving ID#	I09011701	
Manifest#	Line:	
Land Ban Cert included	Yes	No
EGT Approval #		
Generator		
Client		
Transporter		
Time In		
Time out		
Received by	J.H.	
Sampled by	DS	

COPY

PROPERTY	TEST RESULTS	ANALYSIS	TEST RESULTS
Compatible? (RT#)	(Yes) No	Barium	
PCBs (ppm)(Oily Waste Only)?		Calcium	
TOC (ppm)(CC Waste Only)?		Total Iron	
Flash Point (°F)	> 140	Magnesium	
pH (S.U.)	6.7	Sodium Chloride	
Cyanides? (mg/L)		Bicarbonate	
Sulfides? (ppm)		Carbonate	
Specific Gravity	1.02	TDS	1.52
Physical Description		Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	73°F		
Conductivity	29.9 mS		
% Solids	1.5		
Turbidity	Yes No		
Color (visual)			
TSS (%)	0.1		
Radiation Screen (as needed)			
Lab Signature			

**WASTE STREAMS
CHARACTERIZATIONS**



WASTE INFORMATION

Name of Waste/Common Chemical Name:

BULK AQUEOUS LIQUIDS

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

TSDF CONSOLIDATION

USEPA / STATE WASTE IDENTIFICATION

1. This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
 2. Regulated by TSCA? Yes No (PCBs, etc.)
 3. List ALL Applicable Waste Codes: 2004 SEE ATTACHED

PHYSICAL CHARACTERISTICS OF WASTE

Color: <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input checked="" type="checkbox"/> Other <u>VARIABLES</u>	Suspended Solids <input type="checkbox"/> 0-1% <input type="checkbox"/> 3-5% <input type="checkbox"/> 1-3% <input checked="" type="checkbox"/> >5% <u>4-10%</u>	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input type="checkbox"/> 1.3-1.4 Exact / Other _____	acceptable 090517
---	---	---	---	----------------------

pH: NA ≤ 2 2-4 4-6 6-8 8-10 10-12.5 ≥ 12.5

Liquid Flash Point: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - <10,000 ppm (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>WATER</u>	<u>90</u>	<u>99</u>	<u>SODIUM HYDROXIDE</u>	<u>0</u>	<u>10</u>
<u>ZINC CHLORIDE</u>	<u>1</u>	<u>10</u>	<u>LITHIUM NITRATE</u>	<u>0</u>	<u>10</u>
<u>AMMONIUM BLENDAINE</u>	<u>0</u>	<u>2</u>	<u>POTASSIUM HYDROXIDE</u>	<u>0</u>	<u>10</u>
<u>TETRAETHYLENE SULFONE</u>	<u>0</u>	<u>1</u>	<u>SULFURIC ACID</u>	<u>0</u>	<u>10</u>
<u>TOLUENE</u>	<u>0</u>	<u>19</u>	<u>AMMONIUM HYDROGEN</u>	<u>0</u>	<u>2</u>
<u>SODIUM PHENOLATE</u>	<u>0</u>	<u>30</u>	<u>FLUORIDE</u>		
<u>AMMONIUM NITRATE</u>	<u>0</u>	<u>30</u>			

Metals: Indicate if this waste contains any of the following metals. If Generator knowledge provide backup

Lab Analysis Generator Knowledge TCLP TOTAL

Not Present		Concentration		Not Present		Concentration	
PCB	<input checked="" type="checkbox"/>	_____ ppm	Aromatic Amine	<input checked="" type="checkbox"/>	_____ ppm	Arsenic (As)	D004 <input type="checkbox"/> < 5 ppm <u>250</u> ppm
Dioxins	<input checked="" type="checkbox"/>	_____ ppm	Pesticides	<input checked="" type="checkbox"/>	_____ ppm	Barium (Ba)	D006 <input type="checkbox"/> < 100 ppm <u>10,000</u> ppm
Cyanides Reactive	<input checked="" type="checkbox"/>	_____ ppm	Rodenticides	<input checked="" type="checkbox"/>	_____ ppm	Cadmium (Cd)	D008 <input type="checkbox"/> < 1 ppm <u>50</u> ppm
Cyanides Total	<input checked="" type="checkbox"/>	_____ ppm	Fungicides	<input checked="" type="checkbox"/>	_____ ppm	Chromium (Cr)	D007 <input type="checkbox"/> < 5 ppm <u>2,000</u> ppm
Sulfides Reactive	<input checked="" type="checkbox"/>	_____ ppm				Lead (Pb)	D009 <input type="checkbox"/> < 5 ppm <u>2,000</u> ppm
Sulfides Total	<input checked="" type="checkbox"/>	_____ ppm				Mercury (Hg)	D009 <input type="checkbox"/> < 0.2 ppm <u>250</u> ppm
						Selenium (Se)	D010 <input type="checkbox"/> < 1 ppm <u>25</u> ppm
						Silver (Ag)	D011 <input type="checkbox"/> < 5 ppm <u>250</u> ppm

TCLP Organics D012 - D043 above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive Water Reactive Oxidizer Shock Sensitive Reactive (other) DOT Explosives
 NIOSH Human-Possible Carcinogens NESHAP Wastes (Benzene, etc.) Biological None Apply

SHIPPING INFORMATION

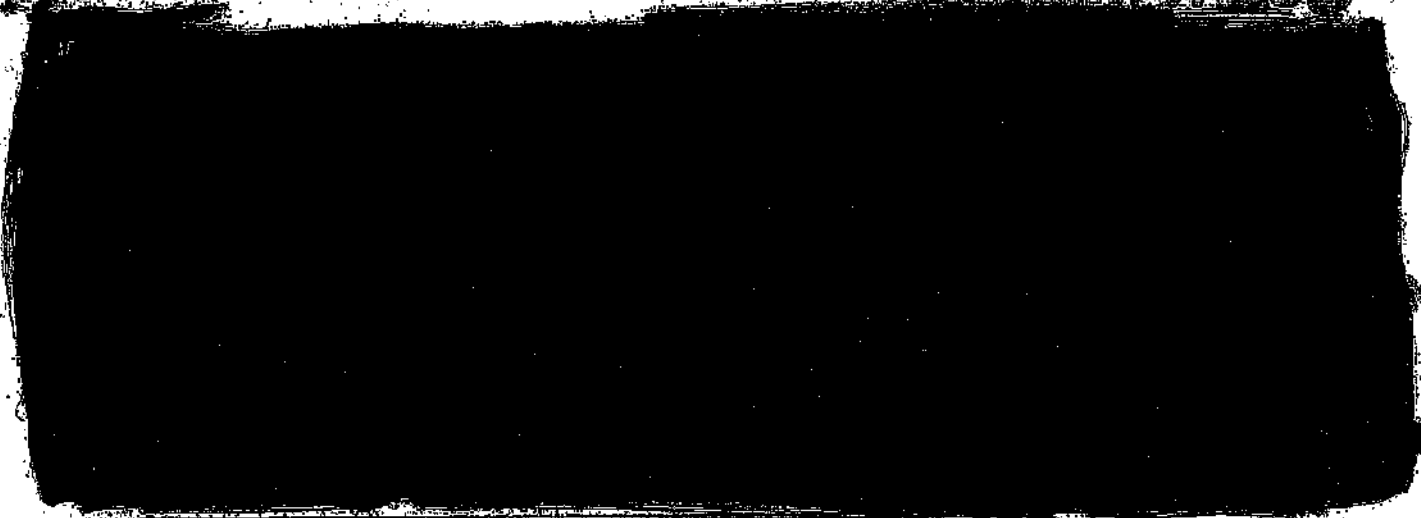
- Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
- Reportable Quantity (RQ) in pounds _____
- DOT Shipping Name HAZARDOUS WASTE LIQUID Hazard Class 9 UN 3082
- PG II ERG _____ Hazardous Constituents for "n.o.s." CHROMIUM, TRICHLOROETHYLENE
- Method of Shipment: Bulk Tanker Vao truck Rail Car Drums Toies
- Number of Units to Ship Now: 5,000 gals Anticipated Volume / Units per Year: 5,000 gals or One Time
- Special Handling Requirements including PPE: BI-WEEKLY

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the waste characterization and/or regulatory requirements.

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: Please collect a representative 1-quart sample of the waste described in the above referenced GENERATOR'S WASTE PROFILE REPORT using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.





WASTE INFORMATION

Name of Waste/Common Chemical Name:

ALKALINE AQUEOUS WASTE

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

CONSOLIDATION OF INDUSTRIAL ALKALINE MATERIALS

USEPA / STATE WASTE IDENTIFICATION

- This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
- Regulated by TSCA? Yes No (PCBs, etc.)
- List ALL Applicable Waste Codes: 2002 SEE ATTACHED LIST

PHYSICAL CHARACTERISTICS OF WASTE

Color <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input checked="" type="checkbox"/> Other <u>VARIES</u>	Suspended Solids <input type="checkbox"/> 0-1% <input type="checkbox"/> 5-5% <input type="checkbox"/> 1-3% <input checked="" type="checkbox"/> >5% <u>10-10%</u>	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input checked="" type="checkbox"/> 1.3-1.4 Exact / Other _____	acceptable 090117
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pH: NA ≤ 2 2-4 4-6 6-8 8-10 10-12.5 ≥ 12.5

Liquid Flash Point: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - < 5,000 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
SODIUM HYDROXIDE	3-15%		SODIUM HYPOCHLORITE	0-10%	
POTASSIUM HYDROXIDE	0-15%		AMMONIUM HYDROXIDE	0-10%	
AMMONIUM HYDROXIDE	5-50%		SODIUM BICARBONATE	0-15%	
WATERS	50-90%		TOLUENE	0-10%	
EDTA	0-10%		TRICHLOROETHYLENE	0-10%	
SODIUM MERCAPTOACRYLATE	0-10%		TETRAETHYLOLPHOSPHORIC ACID	0-10%	
ETHYLENE DIAMINE	0-10%		SODIUM PHENOLATE	0-10%	
DIETHANOLAMINE	0-10%		PHENOL	0-10%	
MONOETHANOLAMINE	0-10%		ERESOL	0-10%	
			TRIETHANOLAMINE	0-5%	
			SODIUM SULFIDE	0-10%	

Metals: Indicate if this waste contains any of the following metals. If Generator knowledge provide backup

Lab Analysis Generator Knowledge TCLP TOTAL

	Not Present	Concentration	Not Present	Concentration							
PGB	<input checked="" type="checkbox"/>	ppm	Aromatic Amine	<input checked="" type="checkbox"/>	ppm	Arsenic (As)	D004	<input type="checkbox"/>	< 5	ppm	500 ppm
Dioxins	<input checked="" type="checkbox"/>	ppm	Pesticides	<input checked="" type="checkbox"/>	ppm	Barium (Ba)	D006	<input type="checkbox"/>	< 100	ppm	10,000 ppm
Cyanides Reactive	<input type="checkbox"/>	ppm	Rodenticides	<input checked="" type="checkbox"/>	ppm	Cadmium (Cd)	D008	<input type="checkbox"/>	< 1	ppm	250 ppm
Cyanides Total	<input type="checkbox"/>	ppm	Fungicides	<input checked="" type="checkbox"/>	ppm	Chromium (Cr)	D007	<input type="checkbox"/>	< 6	ppm	5,000 ppm
Sulfides Reactive	<input type="checkbox"/>	ppm				Lead (Pb)	D005	<input type="checkbox"/>	< 5	ppm	5,000 ppm
Sulfides Total	<input type="checkbox"/>	ppm				Mercury (Hg)	D009	<input type="checkbox"/>	< 0.2	ppm	250 ppm
						Selenium (Se)	D010	<input type="checkbox"/>	< 1	ppm	250 ppm
						Silver (Ag)	D011	<input type="checkbox"/>	< 5	ppm	500 ppm

TCLP Organics D012 - D043 above regulatory limits Present Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive
- Water Reactive
- Oxidizer
- Shock Sensitive
- Reactive (other)
- DOT Explosives
- NIOSH Human Positive Carcinogens
- NESHAP Wastes (Benzene, etc.)
- Biological
- None Apply

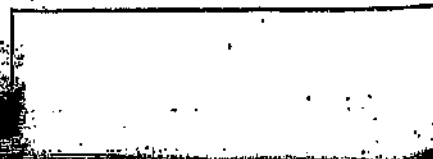
SHIPPING INFORMATION

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
2. Reportable Quantity (RQ) in pounds _____
3. DOT Shipping Name WASTE CORROSIVE LIQUIDS Hazard Class 8 UNNA 3A66
- PG II ERG _____ Hazardous Constituents for "n.o.s." (SODIUM HYDROXIDE, AMMONIUM HYDROXIDE)
4. Method of Shipment: Bulk Tanker Van truck Rail Car Drums Other
5. Number of Units to Ship Now: 3,000 gal. 6. Anticipated Volume / Units per Year: 5,000 gal. or One Time
6. Special Handling Requirements including PPE: SAFETY

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked, I request Environmental Geo-Technologies not to correct any inaccuracies.

GENERATOR'S SIGNATURE: _____ RECORD INSTRUCTIONS: Please collect a representative 1-quart sample of the waste described in the above report. Store the sample in a clean, labeled container using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.



Hazardous Waste "Codes"

D002	F001	K017	P001	U001	U131
D004	F002	K021	P005	U002	U133
D005	F003	K049	P010	U003	U134
D008	F004	K050	P012	U007	U135
D007	F005	K052	P018	U008	U140
D008	F006	K060	P022	U009	U144
D009	F007	K062	P030	U012	U147
D010	F008	K086	P044	U016	U148
D011	F009	K100	P060	U019	U151
D018	F010	K104	P064	U031	U154
D019	F011	K105		U034	U159
D022	F012	K107	P098	U036	U161
D027	F019	K108	P105	U043	U182
D028	F034	K109	P106	U044	U165
D029	F035	K110	P119	U051	U167
D030	F037	K111	P120	U052	U169
D033	F038			U053	U182
D034	F039			U055	U188
D035				U056	U190
D036				U057	U196
D038				U068	U201
D039				U070	U207
D040				U072	U210
D043				U075	U211
				U077	U213
				U078	U219
				U080	U220
				U081	U221
				U088	U222
				U092	U223
				U102	U226
				U103	U227
				U105	U228
				U108	U238
				U112	U239
				U113	
				U117	
				U121	
				U122	
				U123	
				U124	
				U125	

WASTE INFORMATION

Name of Waste/Common Chemical Name:

#5 Cadmium Strip Solution

Process Generating Waste (Please be specific; incomplete information may delay the approval process):

Removing cadmium plating - strip

USEPA / STATE WASTE IDENTIFICATION

1. This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
 2. Regulated by TSCA? Yes No (PCBs, etc.)
 3. List ALL Applicable Waste Codes: D016

PHYSICAL CHARACTERISTICS OF WASTE

Color: <input checked="" type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input type="checkbox"/> Other _____	Suspended Solids <input type="checkbox"/> 0-1% <input type="checkbox"/> 3-5% <input checked="" type="checkbox"/> 1-3% <input type="checkbox"/> >6%	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input type="checkbox"/> 1.3-1.4 Exact / Other _____	acceptable 090317
--	---	---	---	----------------------

pH: NA ≤ 2 2-4 4-6 6-8 8-10 10-12.5 ≥ 12.5

Liquid Flash Point: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - None PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT ≥ 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>Cadmium</u>	<u>2</u>	%			
<u>Ammonium Nitrate</u>	<u>20</u>	%			
<u>Water</u>	<u>68</u>	%			

*see DCP Profile & Lab Analysis
 previously sent on Tue 5 Sept 17*

Metals: Indicate if this waste contains any of the following metals. If Generator Knowledge provide backup

-- Send

<input checked="" type="checkbox"/> Lab Analysis	<input type="checkbox"/> Generator Knowledge	<input checked="" type="checkbox"/> TCLP	<input checked="" type="checkbox"/> TOTAL				
<table border="0"> <tr> <th>Not Present</th> <th>Concentration</th> <th>Not Present</th> <th>Concentration</th> </tr> </table>		Not Present	Concentration	Not Present	Concentration		
Not Present	Concentration	Not Present	Concentration				
PCB	<input type="checkbox"/> ppm	Aromatic Amines	<input type="checkbox"/> ppm	Arsenic (As) D004	<input type="checkbox"/> < 5 ppm	<input type="checkbox"/> ppm	
Dioxins	<input type="checkbox"/> ppm	Pesticides	<input type="checkbox"/> ppm	Barium (Ba) D005	<input type="checkbox"/> < 100 ppm	<input type="checkbox"/> ppm	
Cyanides Reactive	<input type="checkbox"/> ppm	Rodenticides	<input type="checkbox"/> ppm	Cadmium (Cd) D006	<input type="checkbox"/> < 1 ppm	<input type="checkbox"/> ppm	
Cyanides Total	<input type="checkbox"/> ppm	Fungicides	<input type="checkbox"/> ppm	Chromium (Cr) D007	<input type="checkbox"/> < 5 ppm	<input type="checkbox"/> ppm	
Sulfides Reactive	<input type="checkbox"/> ppm			Lead (Pb) D008	<input type="checkbox"/> < 5 ppm	<input type="checkbox"/> ppm	
Sulfides Total	<input type="checkbox"/> ppm			Mercury (Hg) D009	<input type="checkbox"/> < 0.2 ppm	<input type="checkbox"/> ppm	
				Selenium (Se) D010	<input type="checkbox"/> < 1 ppm	<input type="checkbox"/> ppm	
				Silver (Ag) D011	<input type="checkbox"/> < 6 ppm	<input type="checkbox"/> ppm	

TCLP Organics D012 - D048 above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive
- Water Reactive
- Oxidizer
- Shock Sensitive
- Reactive (other)
- DOT Explosives
- NIOSH Human-Possible Carcinogens
- NESHAP Wastes (Benzene, etc.)
- Biological
- None Apply

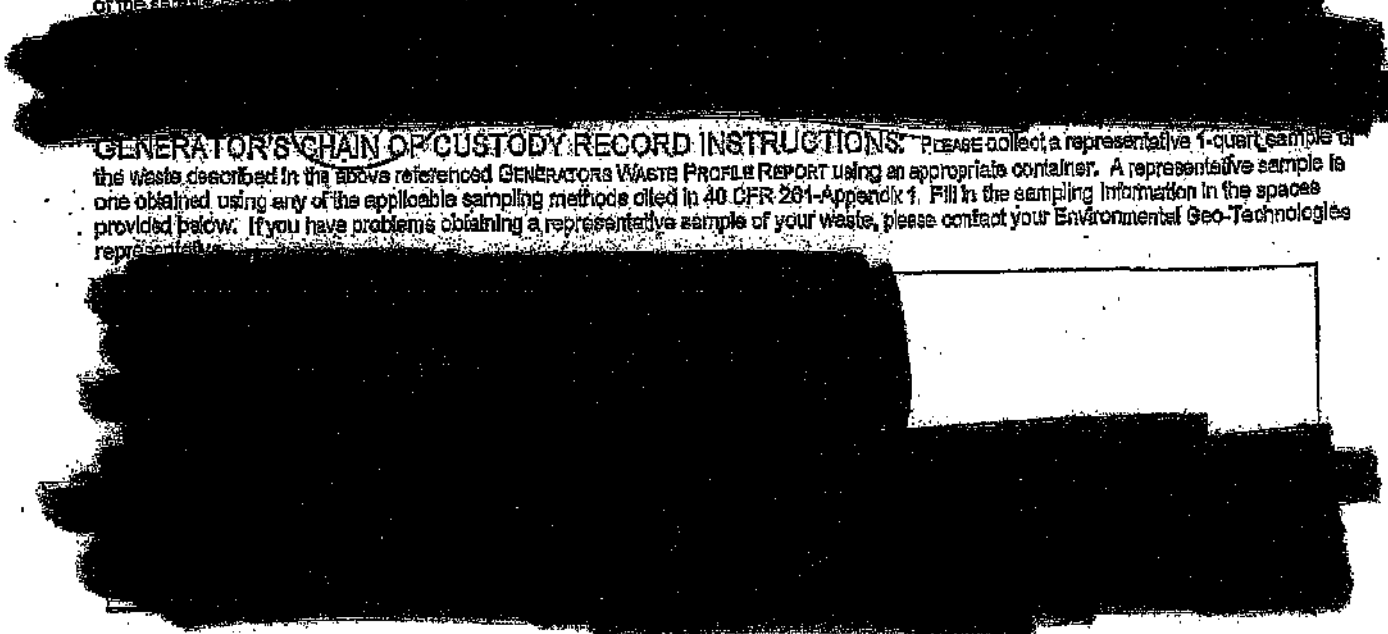
SHIPPING INFORMATION

- Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
- Reportable Quantity (RQ) in pounds _____
- DOT Shipping Name NA 3082, Hazardous Waste, Liquid, N.O.S. (CADMIUM), III Hazard Glass 9 NA 3082
- PG III ERG 171 Hazardous Constituents for "n.o.s." CADMIUM
- Method of Shipment: Bulk Tanker Van/Truck Rail Car Drums Pallets
- Number of Units to Ship Now: 3 6. Anticipated Volume / Units per Year: VARIES or One Time
- Special Handling Requirements including PPE: _____

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sampling.

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: PLEASE collect a representative 1-quart sample of the waste described in the above referenced GENERATOR'S WASTE PROFILE REPORT using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.



FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC.

RECEIVING & APPROVAL FORM

Date	9 / 8 / 17
Receiving ID#	#3 Chromium Sulfate Solution
Manifest# Line:	
Land Ban Cert included	Yes / No
ECR Approval#	
Client	
Transporter	
Time in	
Time out	
Received by	
Sampled by	

Compatible? (RT#)	Yes No	Barium	
PCBs (ppm)(Oily Waste Only)?	N/A	Calcium	
TOC (ppm)(CC Waste Only)?	N/A	Total Iron	
Flash Point (°F)	> 140°F	Magnesium	
pH (S.U.)	7.1	Sodium Chloride	
Cyanides? (mg/L)	10 ppm	Bicarbonate	
Sulfides? (ppm)	< 200	Carbonate	
Specific Gravity	1.08	TDS	
Physical Description	liquid	Resistivity	
Stream Consistency	Yes No	Sulfate	
Oil in Sample	Yes No		
Temperature	64°F		
Conductivity	0.3 mS		
% Solids	14%		
Turbidity	Yes No		
Color (visual)	slight yellow		
TSS (%)	< 1		
Radiation Screen (as needed)	negative		
Lab Signature	P		



36	37	Material Name, as known at facility, unless synonyms	Electroless Nickel Plating Solution Spent Cadmium Plating Solution	Liquid Plating tank solution - off spec	Contains Cd & CN HazWaste for high pH, Cd & CN (CN content varies - may be low from time to time)	Once in 5 yrs	D006, D007, D008	D006, D008, D009, D002	
Physical Description, e.g. Liq, Sludge, Solid, Dust, Color, Odor, etc.	Clear green liquid	Comments:		Less than 1 tote every 5 yrs	Yes	Lab Analysis on clear liquid		Federal (EPA)	HW & Code Non-HW YES or NO?
Appx Monthly Generation Rate & Container								State	HW & Code Non-HW & Code
Determination		Determination Support or Reference							



Applicable LDR Reqmt		36	37
Treatment Std		WW	WW
Waste Water			
Non-Hazardous			
Unlikely Hazardous Constituents			
40 CFR 600.46 L.C. Constituent or Compound		Ni, Zn	Cr at 3.8 mg/L TCLP above WW std=2.77 mg/L
Does Waste Meet LDR Treatment Std. YES or NO			No
Customer or Disposal Site, Code & Approval #		EQ Det #C148118DEI	
Known TRI Constituents & Concentration			Cd, Cr
Haz Mat Y/N			Yes
DOT 49 CFR \$172.101			
Description			
Class			
Placard UN/NA#			
Label			
Packaging Group			
RC Amt			
Emergency Response Guide #			



Process Generating Waste	36	Cadmium Plating Process using CdCN at high pH, sometimes gets high Cu from plating broas parts & can't be treated in our WWTP. New Waste Mar 2015. Sample analysis Mar 2016	37
	Plating solution for Nickel		
Lab Analysis Ref. if any - Links	Electroless Nickel Solution 27Feb14		Waste #37
More Hyperlinks			#37 w/ RCRA Metals

Friday, August 25, 2017

Fibertec Project Number: 80411
Project Identification: Cad Strip Solution-Waste #5 /
Submission Date: 08/24/2017



Dear Mr. Wagner,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 10 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Stacy Kotucki

By Stacy Kotucki at 5:18 PM, Aug 25, 2017

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Sample Description: Waste #5 Cadmium Strip Solution Chain of Custody: 145792
Sample No: 1 Collect Date: 08/24/17
Sample Matrix: Wastewater Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable #: Parameter not included in NELAC Scope of Analysis.

Cyanide, Total Aliquot ID: 80411-001A Matrix: Wastewater
Method: ASTM D7811-09 Description: Waste #5 Cadmium Strip Solution

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	

RCRA Elements by ICP/MIS, Total Recoverable Aliquot ID: 80411-001B Matrix: Wastewater
Method: EPA 0200.8 (Total Recoverable)/EPA 0200.8 Description: Waste #5 Cadmium Strip Solution

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	
2. Barium	400		µg/L	100	40	08/24/17	PT17H24A	08/25/17	T417H26A	JLH
4. Chromium	640		µg/L	10	40	08/24/17	PT17H24A	08/25/17	T417H26A	JLH
6. Selenium	U		µg/L	3.0	40	08/24/17	PT17H24A	08/25/17	T417H26A	JLH

Mercury by CVAAS, Total Aliquot ID: 80411-001B Matrix: Wastewater
Method: EPA 0245.1 Description: Waste #5 Cadmium Strip Solution

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	

pH, Electrometric Aliquot ID: 80411-001 Matrix: Wastewater
Method: SM 4500-H+ B-2000 Description: Waste #5 Cadmium Strip Solution

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		Init.
						P. Date	P. Batch	A. Date	A. Batch	

1914 Holloway Drive
11766 E. Grand River
8660S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0345
T: (810) 220-3300
T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8684

Definitions/Qualifiers:

- A: Spike recovery or precision unusable due to dilution.
- B: The analyte was detected in the associated method blank.
- E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J: The concentration is an estimated value.
- M: Modified Method
- U: The analyte was not detected at or above the reporting limit.
- X: Matrix Interference has resulted in a raised reporting limit or distorted result.
- W: Results reported on a wet-weight basis.
- *: Value reported is outside QC limits

Exception Summary:

- H : Hold time exceeded.
- J- : The result is an estimated quantity, but the result may be biased low.



Accreditation Number(s):

T104704518-17-6 (TX)

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

T: (517) 699-0346
T: (810) 220-8300
T: (231) 775-8588

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584



Analytical Laboratory
 1914 Holloway Drive
 Holt, MI 48842
 Phone: 517 699 0345
 Fax: 517 699 0388
 email: lab@fibertec.us

Industrial Hygiene Services, Inc.
 1914 Holloway Drive
 Holt, MI 48842
 Phone: 517 699 0345
 Fax: 517 699 0382
 email: asbestos@fibertec.us

Geoprobe
 11786 E. Grand River
 Brighton, MI 48116
 Phone: 810 220 9900
 Fax: 810 220 3311

PROJECT TRACKING AND LOGS

Cad Strip Solution Waste #5

QUOTE#

Purchase Order#

DATE	TIME	CLIENT SAMPLE #	CLIENT SAMPLE DESCRIPTION	MATRIX (SEE SIGN CORNER FOR CODE)	# OF CONTAINERS	PRESERVED (Y/N)	PARAMETERS	REMARKS
2017								
24 Aug		1	Waste #5 Cadmium Strip Solution				Total CN PH	Will contribute here so May be Run to

Relinquished By: _____ Date/Time: _____ Received By Laboratory: _____

LAB USE ONLY

Matrix Plate Number: _____

Approval/Labeling: _____

Temperature Receipt: _____

80911

10700

© 2017

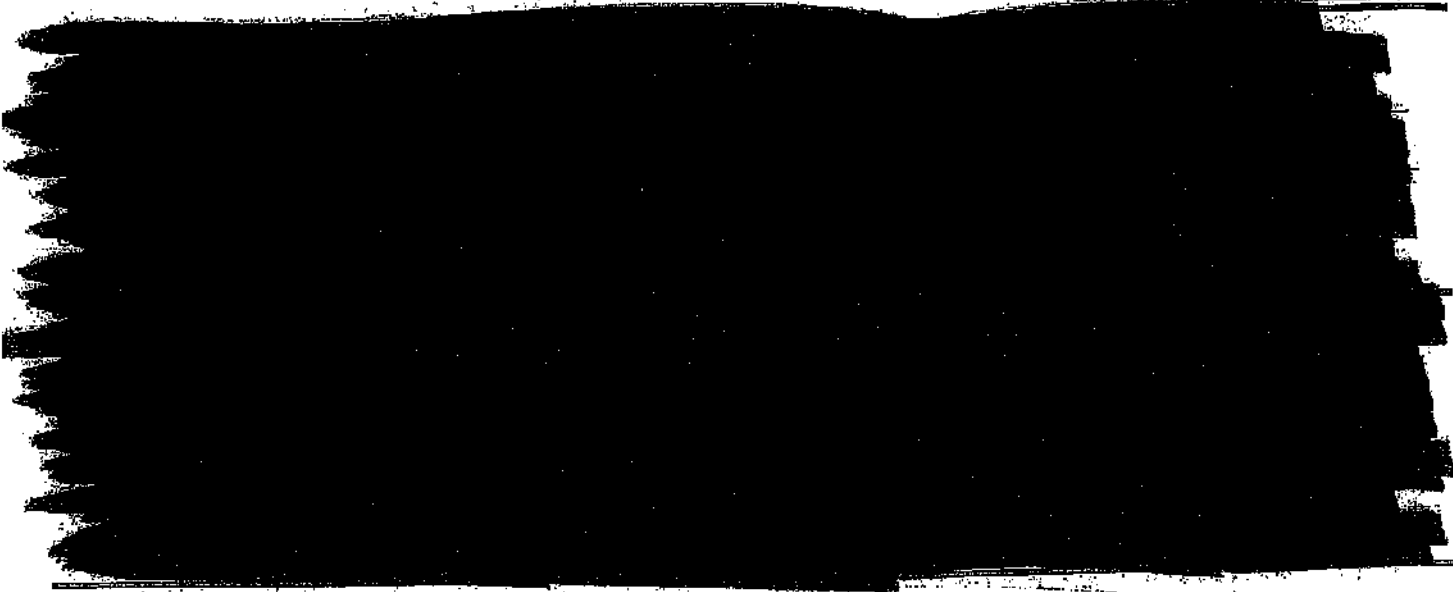
TERMS & CONDITIONS ON BACK

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

28470 Cltrin Dr, Romulus, MI 48174. Telephone 734 946 1000. Fax 734 946 1002

Generator Waste Profile

Profile # **01210**



WASTE INFORMATION

Name of Waste/Common Chemical Name:

Bonderite acid Water

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

Excess Material

USEPA / STATE WASTE IDENTIFICATION

- This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
- Regulated by TSCA? Yes No (PCBs, etc.)
- List ALL Applicable Waste Codes: D002

PHYSICAL CHARACTERISTICS OF WASTE

Color: <input type="checkbox"/> White/Clear <input checked="" type="checkbox"/> Black/Brown <input type="checkbox"/> Other _____	Suspended Solids <input checked="" type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0 - 1.2 <input type="checkbox"/> 0.8 - 1.0 <input type="checkbox"/> 1.3 - 1.4 Exact / Other _____	acceptable 091117
--	---	---	---	----------------------

pH: NA ≤ 2 2 - 4 4 - 6 6 - 8 8 - 10 10 - 12.5 ≥ 12.5

Liquid Flash Point: <73°F 73 - 100°F 101 - 140°F 141 - 200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - 0 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT ≥ 0.1%)

SEE ATTACHED MSDS too

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>Water</u>	<u>99</u>	<u>90</u>			
<u>Phosphate Acid Manganese Salt</u>	<u>0.5</u>	<u>0</u>			
<u>Hexafluoroantimonic Acid</u>	<u>0.5</u>	<u>0</u>			
<u>Phosphoric Acid</u>	<u>0.5</u>	<u>0</u>			
<u>1-Phenyl-2-propanol</u>	<u>0.7</u>	<u>0</u>			

Metals: Indicate if this waste contains any of the following metals. If Generator knows, provide backup.

Metals		No Concentration		Yes Concentration		TCLP		TOTAL	
Present	ppm	Present	ppm	Present	ppm	Present	ppm	Present	ppm
As									
Cadmium									
Chromium (Cr)									
Copper									
Lead									
Manganese									
Mercury									
Nickel									
Selenium									
Silver									
Vanadium									
Zinc									

Is the organic content above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING? At Least One Box Must Be Checked

Radioactive
 Yellow Radioactive
 Oxidizer
 Shock Sensitive
 Reactive (other)
 DOT Explosives
 Non-Ferrous Human Positive Carcinogen
 NESHAP Wastes (hexanes, etc)
 Biological
 Other

SHIPPING INFORMATION

1. Is this a DOT Hazardous Material (49CFR 172.101 & 176 Subpart D)? Yes No

2. Reasonable Quantity (RQ) in package: _____

3. DOT Shipping Name: Waste Hazard Class: UN 3291

4. Method of Shipment: Bulk Tanker Tank Truck Rail Car Airplane Other

5. Number of Units to Ship Now: _____ or One Time

6. Special Handling Requirements including EPC: _____

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all other documents. Based on my familiarity and personal knowledge of these materials, I am responsible for providing or causing the information and materials contained herein to be accurate and complete to the best of my knowledge and belief. I understand that this information has been entered as to make this information accessible to the public and I understand that I am responsible for the accuracy and completeness of the information and materials contained herein. I understand that I am responsible for the accuracy and completeness of the information and materials contained herein. I understand that I am responsible for the accuracy and completeness of the information and materials contained herein.



GENERATOR'S CHAIN OF CUSTODY: Please check a representative 1-gallon sample of the waste described in the above referenced Generator's Waste Profile Report using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods listed in 40 CFR 261 Appendix I. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.



absorbents - Rick

70% Bonderite
93% water

Safety Data Sheet



Revision Number: 003.5

Issue date: 06/23/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BONDERITE M-NT 7400 NON CHROME IDH number: 599060
 PRETREAT known as BONDERITE 7400

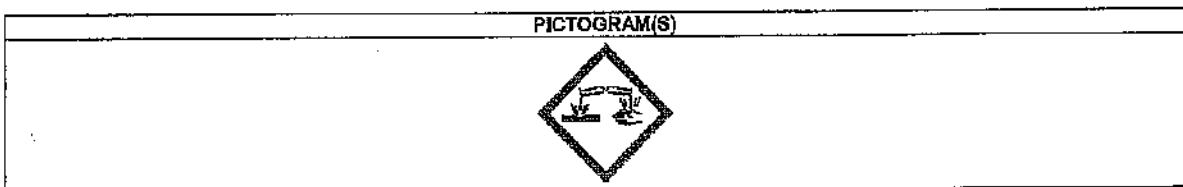
Product type: Coating
 Restriction of Use: None Identified
 Company address: Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067

Region: United States
 Contact information:
 Telephone: (880) 571-5100
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-871-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	CONTAINS FLUORIDES. MAY CAUSE DELAYED BURNS (NOT IMMEDIATELY PAINFUL OR VISIBLE)! LONG TERM EXPOSURE TO FLUORIDES OVER YEARS MAY CAUSE FLUOROSIS! COMBUSTIBLE LIQUID. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN CORROSION	1C
SERIOUS EYE DAMAGE	1



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Wash affected area thoroughly after handling. Wear protective gloves, clothing, eye and face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
1-Propoxy-2-propanol	1569-01-3	5-10
Phosphoric acid, manganese salt	10124-54-6	1.0-5.0
Hexafluorotitanic acid	17439-11-1	1.0-5.0
Phosphoric acid	7864-38-2	1.0-5.0

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
Skin contact:	Remove contaminated clothing and footwear. Rinse with large amounts of running water. GET MEDICAL ATTENTION IMMEDIATELY! If iced 0.13% benzalkonium chloride (Zephiran) solution or 2.5% calcium gluconate gel are available, the rinsing may be limited to 5 minutes, with the soaks or gel applied as soon as the rinsing is stopped. If benzalkonium chloride or calcium gluconate gel is not available, rinsing must continue until medical treatment is provided.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.
Notes to physician:	Treatment of hypocalcemia associated with corrosive fluoride compounds exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	This product is an aqueous mixture and although it will exhibit a flash point, it will not support combustion.

Hazardous combustion products:

Irritating and toxic gases or fumes may be released during a fire.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up.

Clean-up methods:

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. For industrial use only. Do not take internally.

Storage:

For safe storage, store between 40 °F (4.4 °C) and 100 °F (37.8 °C) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Protect from freezing.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
1-Propoxy-2-propanol	None	None	None	None
Phosphoric acid, manganese salt	0.02 mg/m ³ TWA (as Mn) Respirable fraction. 0.1 mg/m ³ TWA (as Mn) Inhalable fraction.	5 mg/m ³ Ceiling (as Mn)	None	None
Hexafluorotitanic acid	2.5 mg/m ³ TWA (as F)	2.5 mg/m ³ PEL (as F) 2.5 mg/m ³ TWA Dust.	None	None
Phosphoric acid	3 mg/m ³ STEL 1 mg/m ³ TWA	1 mg/m ³ PEL	None	None

Engineering controls:

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

Respiratory protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection:

Wear chemical goggles; face shield (if splashing is possible).

Skin protection:

Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid

Color:


Brown

Odor:

Bland

Odor threshold:

Not available.

pH:	< 2 (6% solution) 
Vapor pressure:	Not determined
Boiling point/range:	> 155.6 °C (> 312.1 °F)
Melting point/ range:	Not determined
Specific gravity:	1.09 - 1.12 at 15.6 °C (60.08 °F)
Vapor density:	Not determined
Flash point:	83.3 °C (145.94 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not determined
Flammability:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	5 % EPA Method 24
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. May liberate hydrogen fluoride.
Incompatible materials:	This product may react with strong alkalis. This material will react with glass, concrete, certain metals, silica containing materials, rubber, leather, and many organics.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes
-------------------------------------	------------------------

Potential Health Effects/Symptoms

Inhalation: Mists, vapors or liquid may cause severe irritation or burns.
Skin contact: This product may cause irritation to the skin. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible.
Eye contact: Prolonged contact may cause severe irritation or corneal burns.
Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
1-Propoxy-2-propanol	Oral LD50 (Rat) = 2.8 g/kg Dermal LD50 (Rabbit) = 3.56 g/kg	Central nervous system, Eyes, Irritant, Kidney
Phosphoric acid, manganese salt	None	Behavioral, Blood, Developmental, Irritant, Kidney, Liver, Lung, Mutagen, Nervous System, Reproductive, Respiratory, Vascular
Hexafluorotitanic acid	None	No Records
Phosphoric acid	Oral LD50 (Rat) = 1,530 mg/kg Dermal LD50 (Rabbit) = 2,740 mg/kg	Irritant, Corrosive

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
1-Propoxy-2-propanol	No	No	No
Phosphoric acid, manganese salt	No	No	No
Hexafluorotitanic acid	No	No	No
Phosphoric acid	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal. This chemical contains heavy metals. This chemical contains phosphates.

Hazardous waste number: This product, if discarded, may be characterized as a RCRA corrosive waste, D002.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (Hexafluoro titanic acid, Phosphoric acid)
Hazard class or division: 8
Identification number: UN 3264
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (Hexafluoro titanic acid, Phosphoric acid)
Hazard class or division: 8
Identification number: UN 3264
Packing group: III

Water Transportation (IMO/MDG)

Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hexafluoro titanio acid, Phosphoric acid)
Hazard class or division: 8
Identification number: UN 3284
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Phosphoric acid, manganese salt (CAS# 10124-54-6).
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDL Status: One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New information added in Section(s): 1, 4 and 13.

Prepared by: Regulatory Affairs

Issue date: 06/23/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



MATERIAL SAFETY DATA SHEET

NFPA	HMS	Personal Protective Equipment						
	<table border="1"> <tr> <td>FLAMMABLE</td> <td align="center">2</td> </tr> <tr> <td>IRITANT</td> <td align="center">2</td> </tr> <tr> <td>REACTIVE</td> <td align="center">0</td> </tr> </table>	FLAMMABLE	2	IRITANT	2	REACTIVE	0	
FLAMMABLE	2							
IRITANT	2							
REACTIVE	0							
<div style="border: 1px solid black; padding: 2px; display: inline-block;">See Section 8.</div>								

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Product code:	P1848
Product Name:	Propylene Glycol Monopropyl Ether
Chemical Name:	2-Propanol, 1-propoxy-
Synonyms:	1-Propoxy-2-propanol PROPASOL Solvent P Propylene glycol n-propyl ether
Recommended use:	No information available.
CAS #:	1569-01-3
Formula:	C6-H14-O2
RTECS #	UB9351000
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW			
WARNING FLAMMABLE! WARNING! IRRITANT. Irritating to eyes. Irritating to skin.			
Odor: Mild.	Physical state: Liquid.	Appearance: No information available	Color: Clear. Colorless.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Ingestion, Skin, Eyes, Inhalation.

Acute Potential Health Effects:**Skin Contact:**

Contact causes skin irritation. It may be absorbed through the skin.

Eye Contact:

Causes eye irritation. Moderately irritating to the eyes. Lachrymator (substance which increases the flow of tears).

Inhalation:

May cause irritation of respiratory tract. May cause central nervous system effects.

Ingestion:

Causes digestive (gastrointestinal) tract irritation. May cause central nervous system effects.

Chronic Potential Health Effects:

Target Organs: Central nervous system.

Carcinogen Status: No information available

Mutagenic Effects: No information available

Teratogenic Effects: No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Propylene Glycol Monopropyl Ether	1569-01-3	100

4. FIRST AID MEASURES

General Advice:

Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact:

Flush eye with water for 15 minutes. Get medical attention.

Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Notes to Physician: Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	48 °C/118.4 °F
----------------------------	----------------

Tested according to: CC

Lower Explosion Limit (%):	No information available
-----------------------------------	--------------------------

Upper Explosion Limit (%):	No information available
-----------------------------------	--------------------------

Autoignition Temperature (°C/°F):	252 °C/486 °F
--	---------------

Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Hazardous Combustion Products: Carbon oxides

Specific hazards: Flammable. May be ignited by heat, sparks or flames. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods: Water mist may be used to cool closed containers. For fires involving tanks or car/trailer load, cool containers with flooding quantities of water until well after the fire is out.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up:

Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE**Handling****Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Storage**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Products:

Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal Protective Equipment

- Eye protection:** Goggles. Safety glasses with side-shields.
- Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.
- Respiratory protection:** Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

National occupational exposure limits**United States**

U.S Occupational Exposure Limits: Not determined

Canada

Canada Occupational Exposure Limits: Not determined

Australia and Mexico

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: No information available	Color: Clear. Colorless.
Odor: Mild.	Taste: No information available	Molecular weight: 118.17
Flash point (°C) : 48	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): 252 °C/486 °F	pH: No information available	Boiling point/range(°C/°F): 140-160 °C/284-320 °F
Melting point/range(°C/°F): -80 °C/ -112 °F	Decomposition temperature(°C/°F): No information available	Specific gravity: 0.884-0.8865 @ 20 °C
Density (g/cm3): 0.885 @ 25 °C	Bulk density: No information available	Vapor pressure @ 20°C (kPa): 0.227
Vapor density: 4.0	Evaporation rate: 0.22 (butyl acetate = 1)	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Miscibility: Miscible in water
Solubility: No information available		

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Conditions to avoid:	Heat. Ignition sources.
Materials to avoid:	Strong oxidising agents.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide. When heated to decomposition it emits acrid smoke and irritating fumes.
Possibility of Hazardous Reactions:	No information available
Polymerization:	Hazardous polymerisation does not occur
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION**Acute Toxicity****Component Information**

Propylene Glycol Monopropyl Ether - 1569-01-3

LD50/oral/rat = 2504 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = 3550 mg/kg Dermal LD50 Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available

Product Information

LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
LD50/dermal/rabbit = 3550 mg/kg
LD50/dermal/rat = No information available
LD50/oral/rat = 2504 mg/kg
LD50/oral/mouse = No information available

Local Effects

Skin irritation: Irritating to skin. Mild skin irritation. Moderate skin irritation.
Eye irritation: Causes eye irritation. Moderate eye irritation. Causes lacrimation.
Inhalation: May cause irritation of respiratory tract. May affect behavior/central nervous system (central nervous system depression with sluggishness, unsteady gait, ataxia, and prostration).
Ingestion: Causes digestive (gastrointestinal) tract irritation. It may affect behavior/central nervous system (central nervous system depression, ataxia, general anesthetic).
Sensitization: No information available

Chronic Toxicity

Chronic Toxicity Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated inhalation may cause central nervous system effects. Prolonged or repeated exposure of eyes to vapor or mist may cause corneal damage.
Carcinogenic effects: No information available
Mutagenic Effects: No information available
Reproductive Effects: No information available
Teratogenic Effects: No information available
Target Organs: Central nervous system.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available
Ecotoxicity effects: No data available

Aquatic toxicity: No information available
Mobility: No information available
Persistence and degradability: No information available
Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Propylene Glycol Monopropyl Ether	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN3271
Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
Hazard Class: 3
Packing Group: III
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: 127
DOT RQ (lbs): No information available

TDG (Canada)

Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
UN-No: UN3271
Hazard Class: 3
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

ADR

Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
UN-No: UN3271
Hazard Class: 3
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
UN-No: UN3271
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: III
Description: No information available
IMDG Page: No information available

Marine Pollutant: No information available
EMS: F-E
MFAG: No information available
Maximum Quantity: No information available

RID

Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
UN-No: UN3271
Hazard Class: 3
Packing Group: III
Subsidiary Risk: 3
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN3271
Hazard Class: 3
Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

IATA

Proper Shipping Name: Ethers, n.o.s (Propylene Glycol Monopropyl Ether)
UN-No: UN3271
Hazard Class: 3
Packing Group: III
Subsidiary Risk: No information available
ERG Code: 3L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Propylene Glycol Monopropyl Ether	Present	Present	KE-29773	(7)-97	Present	Present	216-372-4

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Propylene Glycol Monopropyl Ether	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Propylene Glycol Monopropyl Ether	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Propylene Glycol Monopropyl Ether	Not Applicable	Not Applicable

Canada

WHMIS hazard class:
D2B Toxic materials
B3 Combustible liquid

Inventory

Components	Canada (DSL)	Canada (NDSL)
Propylene Glycol Monopropyl Ether	Present	Not Listed

EU Classification

R -phrase(s)

R10 - Flammable.
R36/37/38 - Irritating to eyes, respiratory system and skin.

S -phrase(s)

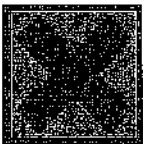
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.

Xi



16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date: 10-Jun-2010
Reason for revision: Not applicable
Prepared by: Sonia Owen

Literature reference:

No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.



WASTE INFORMATION

Name of Waste/Common Chemical Name:

Hex Chrome Plating Bath

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

Decommissioning chrome plating line / tank

USEPA / STATE WASTE IDENTIFICATION

- This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
- Regulated by TSCA? Yes No (PCBs, etc.)
- List ALL Applicable Waste Codes: D002 D003 D008 D010 D041

PHYSICAL CHARACTERISTICS OF WASTE

Color: <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input type="checkbox"/> Other _____	Suspended Solids <input type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input type="checkbox"/> 1.0 - 1.2 <input type="checkbox"/> 0.8 - 1.0 <input type="checkbox"/> 1.3 - 1.4 Exact / Other _____	acceptable 092817
---	--	--	--	----------------------

pH: NA ≤ 2 2-4 4-6 6-8 8-10 10-12.5 ≥ 12.5

Liquid Flash Points: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - 0 ppm (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>Chromic Acid</u>	<u>80</u>	<u>90</u>			
<u>Water</u>	<u>10</u>	<u>20</u>			

Metals: Indicate if this waste contains any of the following metals. If Generator knowledge provides backup
 Lab Analysis Generator Knowledge TCLP TOTAL

Not Present		Concentration	Not Present		Concentration	Code	Limit	Value	Unit
PCB	<input checked="" type="checkbox"/>	ppm	Aromatic Amine	<input checked="" type="checkbox"/>	ppm	Asenite (As)	D004	< 5	ppm
Dioxins	<input checked="" type="checkbox"/>	ppm	Pesticides	<input checked="" type="checkbox"/>	ppm	Berium (Ba)	D005	< 100	ppm
Cyanides Reactive	<input checked="" type="checkbox"/>	ppm	Rodenticides	<input checked="" type="checkbox"/>	ppm	Cadmium (Cd)	D008	< 1	ppm
Cyanides Total	<input checked="" type="checkbox"/>	ppm	Fungicides	<input checked="" type="checkbox"/>	ppm	Chromium (Cr)	D007	< 8	ppm
Sulfides Reactive	<input checked="" type="checkbox"/>	ppm				Lead (Pb)	D003	< 5	ppm
Sulfides Total	<input checked="" type="checkbox"/>	ppm				Mercury (Hg)	D009	< 0.2	ppm
						Selenium (Se)	D010	< 1	ppm
						Silver (Ag)	D011	< 5	ppm

TCLP Organics D012 - D043 above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive Water Reactive Oxidizer Shock Sensitive Reactive (other) DOT Explosives
 NIOSH Human-Possible Carcinogens NESHAP Wastes (Benzene, etc.) Biological None Apply

SHIPPING INFORMATION

- Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
- Reportable Quantity (RQ) in pounds _____
- DOT Shipping Name 2Q, UN1755, Chromic Acid Solution Hazard Class 8 UN/NA UN1753
- PG II ERG 151 Hazardous Constituents for "h.o.s." _____
- Method of Shipment: Tanker Van truck Rail Car Drums Totes
- Number of Units to Ship Now: _____ 6. Anticipated Volume / Units per Year: _____ or One Time
- Special Handling Requirements including PPE: _____

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sample characterization and/or representative sampling.

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: PLEASE collect a representative 1-quart sample of the waste described in the above referenced GENERATOR'S WASTE PROFILE REPORT using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.



February 17, 2017

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

For clients that require NELAC Accreditation, Trace certifies that these test results meet all requirements of the NELAC Standard, except for those analytes with a "N" notation. These analytes have not been evaluated by NELAC at Trace's discretion and will not be reported unless requested by client.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at groe@trace-labs.com.

Sincerely,



Gina M. Roe
Laboratory Manager

Enclosures



NJDEP Accreditation No. M1008

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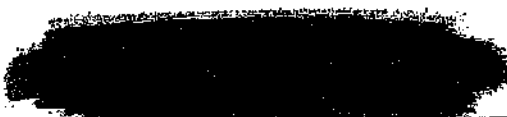


the science of compliance

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Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-1673
info@trace-labs.com
www.trace-labs.com

SAMPLE SUMMARY



Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
T178243-01	Chrome Bath	Aqueous	nick	02/15/17 14:00	02/16/17 12:53

CERTIFICATE OF ANALYSIS

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AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
RDL	Reporting Detection Limit
MCL	Maximum Contamination Limit
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
N	The result for this analyte is not covered under our NJ NELAP Annual Certified Parameter List
NA	Indicates that the compound is not available.

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.

DATA QUALIFIERS

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ANALYTICAL RESULTS

Trace ID: T17B243-01
 Sample ID: Chroma Bath

Date Collected: 02/15/17 14:00
 Date Received: 02/16/17 12:53

Matrix: Aqueous

PARAMETERS	RESULTS	UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	NOTES	MCL
METALS, TCLP								
<i>Analysis Method: EPA 8010B</i>								
<i>Batch: T067333</i>								
Arsenic	*	39 mg/L	0.30	1	02/17/17	kbc	02/17/17 dtm	5.0
Barium		4.3 mg/L	1.0	1	02/17/17	kbc	02/17/17 dtm	100
Cadmium		0.65 mg/L	0.10	1	02/17/17	kbc	02/17/17 dtm	1.0
Chromium	*	76000 mg/L	90	1000	02/17/17	kbc	02/17/17 dtm	6.0
Lead	*	80 mg/L	0.50	1	02/17/17	kbc	02/17/17 dtm	5.0
Selenium	*	1.2 mg/L	0.60	1	02/17/17	kbc	02/17/17 dtm	1.0
Silver		2.2 mg/L	0.10	1	02/17/17	kbc	02/17/17 dtm	5.0
<i>Analysis Method: EPA 7470A</i>								
<i>Batch: T067332</i>								
Mercury		0.030 mg/L	0.010	1	02/17/17	kbc	02/17/17 dtm	0.20
WET CHEMISTRY								
<i>Analysis Method: EPA 9040C</i>								
<i>Batch: T067352</i>								
Corrosivity-pH		0.440 pH Units		1	02/17/17	nm	02/17/17 kj	N

CERTIFICATE OF ANALYSIS

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SAMPLE LOG IN CHECKLIST

Trace ID #: T17B243 Date: 2-16-17 Package Description: Cooler Temperature: -30
Client Name: [REDACTED] Time: 13:30 Logged In by: [Signature]

Cooler Receipt

Cooler/samples delivered by: Trace courier Hand delivered Commercial courier UPS FED EX US Mail

Name of delivery person: Tim

Tracking Number: Not Applicable Tracking #: _____

COC Seals present and intact on cooler? No Yes Not Applicable

Custody seals signed by Client? No Yes Client custody seal # (if applicable): _____

Coolant and Temperature

Type of Coolant Used
Slurry w/ crushed, cubed, or chip ice?
Multiple bags of ice around samples?
Ice Packs/ Blue ice:
No Coolant Present:

Ice still present upon receipt (circle one): Yes No N/A

Cooler Temperature
Correction Factors: • Digital Stick Thermometer CF = -1.0°C
• Thermocouple CF = -1.0°C

Temperature Blank: 30 °C (Digital Stick Thermometer)
Range of 3 samples: 4.1 °C (Thermocouple)
Melt Water: None °C (Use Digital Stick Thermometer)

	General			Comments
	Yes	No	NA	
All bottles arrived unbroken with labels in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Each sample point is in a sealed plastic bag?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Labels filled out completely?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All bottle labels agree with Chain of Custody (COC)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sufficient sample to run tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
pH checked and samples at correct pH?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	See Below*
Correct preservative added to samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Air bubbles absent from VOCs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
COC filled out properly and signed by client?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COC signed in by TRACE sample custodian?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was project manager called and samples discussed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Notes:

*EMD pH Test Strips Used:

pH 4-2.5 Lot: HC583783 pH 11.0-13.0 Lot: HC647828
 Other: _____

Lot HC583783 verified 6/21/16 AY
Lot HC647828 verified 6/30/16 AY

TRACE Analytical Laboratories, Inc.

Form 70-A.17
Effective 1/16/17

CERTIFICATE OF ANALYSIS

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WASTE INFORMATION

Name of Waste/Common Chemical Name:

Caustic Tank Cleanout

Process Generating Waste (Please be specific, incomplete information may delay the approval process):

Sodium hydroxide tank cleanout

USEPA / STATE WASTE IDENTIFICATION

- This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
- Regulated by TSCA? Yes No (PCBs, etc.)
- List ALL Applicable Waste Codes: D002

PHYSICAL CHARACTERISTICS OF WASTE

Color: <input type="checkbox"/> White/Clear <input type="checkbox"/> Black/Brown <input checked="" type="checkbox"/> Other <u>Tan</u>	Suspended Solids <input checked="" type="checkbox"/> 0-1 % <input type="checkbox"/> 3-5 % <input type="checkbox"/> 1-3 % <input type="checkbox"/> > 5%	Layers: <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input type="checkbox"/> 1.3-1.4 Exact / Other _____	acceptable 09/14/17
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pH: NA ≤ 2 2-4 4-8 8-8 8-10 10-12.5 ≥12.5

Liquid Flash Point: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - <100 PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
Sodium hydroxide	30	10			
Water	70	50			
Bleach	10	5			
Scale	1	0			

Metals: Indicate if this waste contains any of the following metals. If Generator knowledge-provide backup

<input type="checkbox"/> Lab Analysis	<input checked="" type="checkbox"/> Generator Knowledge	<input type="checkbox"/> TCLP	<input type="checkbox"/> TOTAL	
	Not Present	Concentration	Not Present	Concentration
PCB	<input checked="" type="checkbox"/>	_____ ppm	Aromatic Amine	<input checked="" type="checkbox"/> _____ ppm
Dioxins	<input checked="" type="checkbox"/>	_____ ppm	Pesticides	<input checked="" type="checkbox"/> _____ ppm
Cyanides Reactive	<input checked="" type="checkbox"/>	_____ ppm	Rodenticides	<input checked="" type="checkbox"/> _____ ppm
Cyanides Total	<input checked="" type="checkbox"/>	_____ ppm	Fungicides	<input checked="" type="checkbox"/> _____ ppm
Sulfides Reactive	<input checked="" type="checkbox"/>	_____ ppm		
Sulfides Total	<input type="checkbox"/>	<50 ppm		
			Arsenic (As)	D004 <input checked="" type="checkbox"/> < 5 ppm _____ ppm
			Berilium (Be)	D005 <input checked="" type="checkbox"/> <100 ppm _____ ppm
			Cadmium (Cd)	D005 <input checked="" type="checkbox"/> < 1 ppm _____ ppm
			Chromium (Cr)	D007 <input checked="" type="checkbox"/> < 5 ppm _____ ppm
			Lead (Pb)	D008 <input checked="" type="checkbox"/> < 5 ppm _____ ppm
			Mercury (Hg)	D009 <input checked="" type="checkbox"/> <0.2 ppm _____ ppm
			Selenium (Se)	D010 <input checked="" type="checkbox"/> < 1 ppm _____ ppm
			Silver (Ag)	D011 <input checked="" type="checkbox"/> < 5 ppm _____ ppm

TCLP Organics D012 - D043 above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING?

At Least One Box Must Be Checked.

- Radioactive Water Reactive Oxidizer Shock Sensitive Reactive (other) DOT Explosives
 NIOSH Human-Positive Carcinogens NESHAP Wastes (Benzene, etc.) Biological None Apply

SHIPPING INFORMATION

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
 2. Reportable Quantity (RQ) in pounds 100
 3. DOT Shipping Name RO Waste Sodium Hydroxide Hazard Class 8 UN/NA 1824
 PG II ERG 154 Hazardous Constituents for "n.o.s." _____
 4. Method of Shipment: Bulk Tanker Vac truck Rail Car Drums Totes
 5. Number of Units to Ship Now: 4,000 Gallon 6. Anticipated Volume / Units per Year: 10,000 gallons or One Time
 6. Special Handling Requirements including PPE: _____

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sample characterization report.

GENERATOR'S CHAIN OF CUSTODY RECORD INSTRUCTIONS: PLEASE collect a representative 1-quart sample of the waste described in the above referenced GENERATOR'S WASTE PROFILE REPORT using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 261-Appendix 1. Fill in the sampling information in the spaces provided below. If you have any questions regarding the sampling of your waste, please contact your Environmental Geo-Technologies representative.



WASTE INFORMATION

Name of Waste/Common Chemical Name:

CHROME WATER

Process Generating Waste (Please be specific - incomplete information may delay the approval process):

GROUND WATER EXTRACTION SYSTEM

USEPA / STATE WASTE IDENTIFICATION

- This waste is considered to be: Non Hazardous Liquid Industrial Waste Hazardous Waste
- Regulated by TSCA? Yes No (PCBs, etc.)
- List ALL Applicable Waste Codes: 2002 2007

PHYSICAL CHARACTERISTICS OF WASTE

Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Black/Brown <input type="checkbox"/> Other	Suspended Solids <input checked="" type="checkbox"/> 0-1% <input type="checkbox"/> 3-5% <input type="checkbox"/> 1-3% <input type="checkbox"/> > 5%	Layers <input type="checkbox"/> Multi-Layered <input type="checkbox"/> Bi-Layered <input checked="" type="checkbox"/> Single Phase	Specific Gravity: <input type="checkbox"/> <0.8 <input checked="" type="checkbox"/> 1.0-1.2 <input type="checkbox"/> 0.8-1.0 <input type="checkbox"/> 1.3-1.4 Exact / Other	<i>acceptable</i> <i>100</i> <i>092517</i>
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pH: NA ≤ 2 2-4 4-6 6-8 8-10 10-12.5 ≥ 12.5

Liquid Flash Point: <73°F 73-100°F 101-140°F 141-200°F >200°F None Closed Cup Open Cup

VOC CONCENTRATION - -0- PPM (MUST BE COMPLETED)

TOTAL COMPOSITION OF WASTE - MUST BE EQUAL TO OR GREATER THAN 100% (LIST EACH CONSTITUENT >= 0.1%)

CONSTITUENT	MAX	MIN	CONSTITUENT	MAX	MIN
<u>WATER</u>	<u>99.99%</u>				
<u>CALCIUM HYDROXIDE</u>	<u>1.10%</u>				
<u>CHROMIUM</u>	<u>32780 PPM</u>				
<u>VINYL CHLORIDE</u>	<u>0.100</u>		<u>PPB</u>		

Metals: Indicate if this waste contains any of the following metals. If Generator Knowledge provide backup

Lab Analysis		Generator Knowledge		TCPL		TOTAL	
Not Present	Concentration	Not Present	Concentration				
PCB	<input checked="" type="checkbox"/> _____ ppm	Aromatic Amine	<input checked="" type="checkbox"/> _____ ppm	Arsenic (As)	D004	<input checked="" type="checkbox"/> < 5	_____ ppm
Dioxins	<input checked="" type="checkbox"/> _____ ppm	Pesticides	<input checked="" type="checkbox"/> _____ ppm	Barium (Ba)	D008	<input checked="" type="checkbox"/> < 100	_____ ppm
Cyanides Reactive	<input checked="" type="checkbox"/> _____ ppm	Rodenticides	<input checked="" type="checkbox"/> _____ ppm	Cadmium (Cd)	D008	<input checked="" type="checkbox"/> < 1	_____ ppm
Cyanides Total	<input checked="" type="checkbox"/> _____ ppm	Fungicides	<input checked="" type="checkbox"/> _____ ppm	Chromium (Cr)	D007	<input checked="" type="checkbox"/> < 5	_____ ppm
Sulfides Reactive	<input checked="" type="checkbox"/> _____ ppm			Lead (Pb)	D008	<input checked="" type="checkbox"/> < 5	_____ ppm
Sulfides Total	<input checked="" type="checkbox"/> _____ ppm			Mercury (Hg)	D009	<input checked="" type="checkbox"/> < 0.2	_____ ppm
				Selenium (Se)	D010	<input checked="" type="checkbox"/> < 1	_____ ppm
				Silver (Ag)	D011	<input checked="" type="checkbox"/> < 5	_____ ppm

TCPL Organics D012 - D043 above regulatory limits: Present Not Present

IS WASTE ANY OF THE FOLLOWING? *At Least One Box Must Be Checked.*

Radioactive Water Reactive Oxidizer Shock Sensitive Reactive (other) DOT Explosives
 NIOSH Human-Positive Carcinogens NESHAP Wastes (Benzene, etc.) Biological None Apply

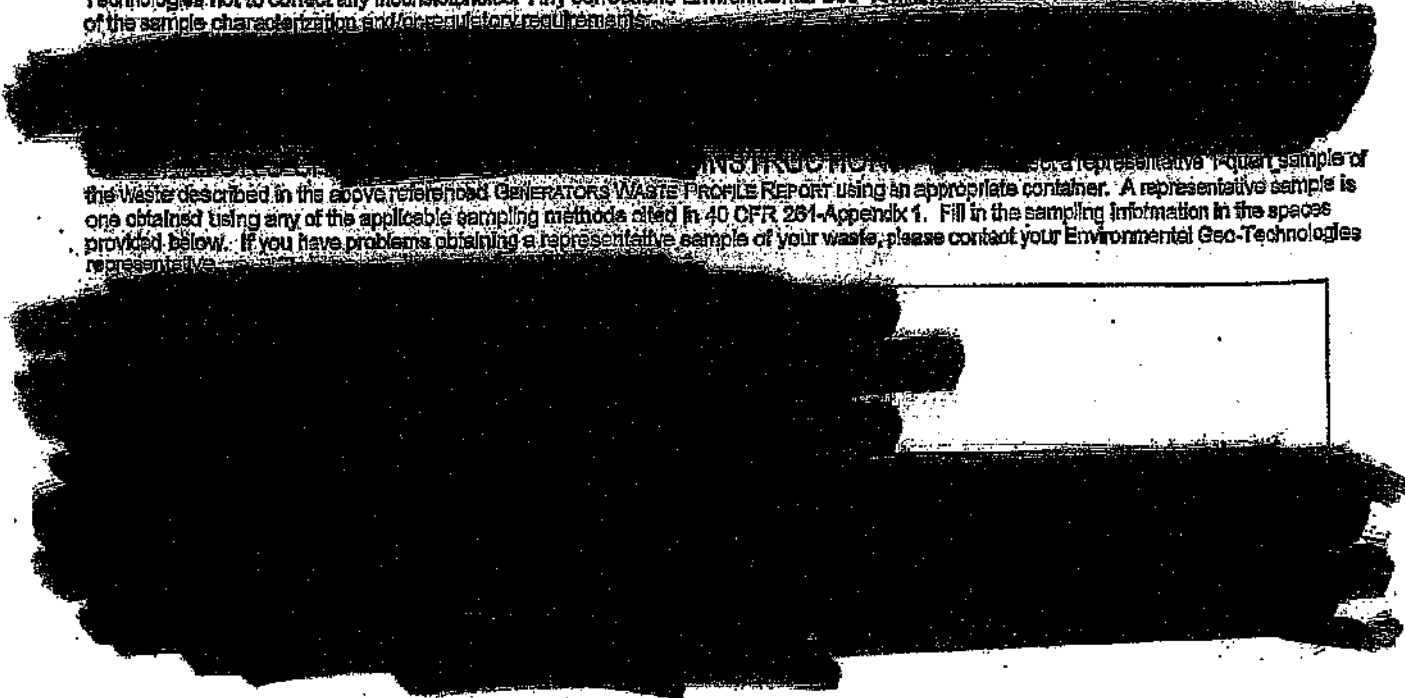
SHIPPING INFORMATION

1. Is this a DOT Hazardous Material (49CFR 172.101 & 173 Subpart D)? Yes No
2. Reportable Quantity (RQ) in pounds _____
3. DOT Shipping Name WASTE CORROSIVE LIQUID, BASIC Hazard Class 8 UN/NAAL 3264
 PG II ERG _____ Hazardous Constituents for "h.o.s." SODIUM HYDROXIDE, AMMONIUM
4. Method of Shipment: Bulk Tanker Van truck Rail Car Drums Totes
5. Number of Units to Ship Now: 0 6. Anticipated Volume / Units per Year: 20,000 gals One-Time
6. Special Handling Requirements including PPE: _____

CERTIFICATION STATEMENT

I hereby represent and warrant that I have personally examined and am familiar with the information contained and submitted in this and all attached documents. Based on my inquiry and personal knowledge of those individuals responsible for supplying or obtaining the information, the information contained herein is true, accurate, and complete to the best of my knowledge and belief. Furthermore, no material fact has been omitted as to make this information misleading. I understand that others may rely on this representation and warranty in the handling and processing of the waste material described herein. If this box is checked , I request Environmental Geo-Technologies not to correct any inconsistencies. Any corrections Environmental Geo-Technologies makes will be consistent with the results of the sample characterization and/or regulatory requirements.

INSTRUCTIONS: A representative request sample of the waste described in the above referenced Generator's Waste Profile Report using an appropriate container. A representative sample is one obtained using any of the applicable sampling methods cited in 40 CFR 281-Appendix 1. Fill in the sampling information in the spaces provided below. If you have problems obtaining a representative sample of your waste, please contact your Environmental Geo-Technologies representative.



FINGERPRINT FORM

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

RECEIVING & APPROVAL FORM

Date	10/12/17
Receiving ID#	Chrome Water
Manifest# Line:	
Land Ben. Cert. Included	Yes No
Client	[REDACTED]
Transporter	
Time In	
Time out	
Received by	J.H.
Sampled by	Client

Compatible? (RT#)	<input checked="" type="radio"/> Yes <input type="radio"/> No	Barium	
PCBs (ppm)(Oily Waste Only)?	N/A	Calcium	
TOC (ppm)(GC Waste Only)?	N/A	Total Iron	
Flash Point (°F)	5, 140 129	Magnesium	
pH (S.U.)		Sodium Chloride	
Cyanides? (mg/L)	<30	Bicarbonate	
Sulfides? (ppm)	<250	Carbonate	
Specific Gravity	1.02	TDS	
Physical Description	1.7650	Resistivity	
Stream Consistency	<input checked="" type="radio"/> Yes <input type="radio"/> No	Sulfate	
Oil in Sample	Yes <input checked="" type="radio"/> No <input type="radio"/>		
Temperature	59°F		
Conductivity	14.9 μS		
% Solids	0.9		
Turbidity	Yes <input type="radio"/> No <input checked="" type="radio"/>		
Color (visual)	Yellow		
TSS (%)	1.0		
Radiation Screen (as needed)	Negative		
Lab Signature	[Signature]		